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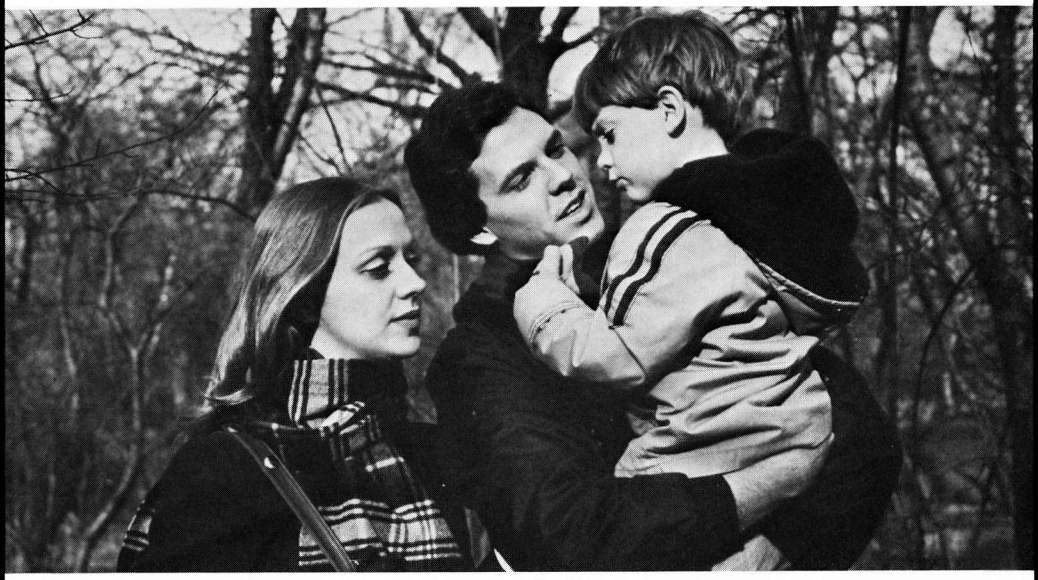

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President's Message

Hello out there!

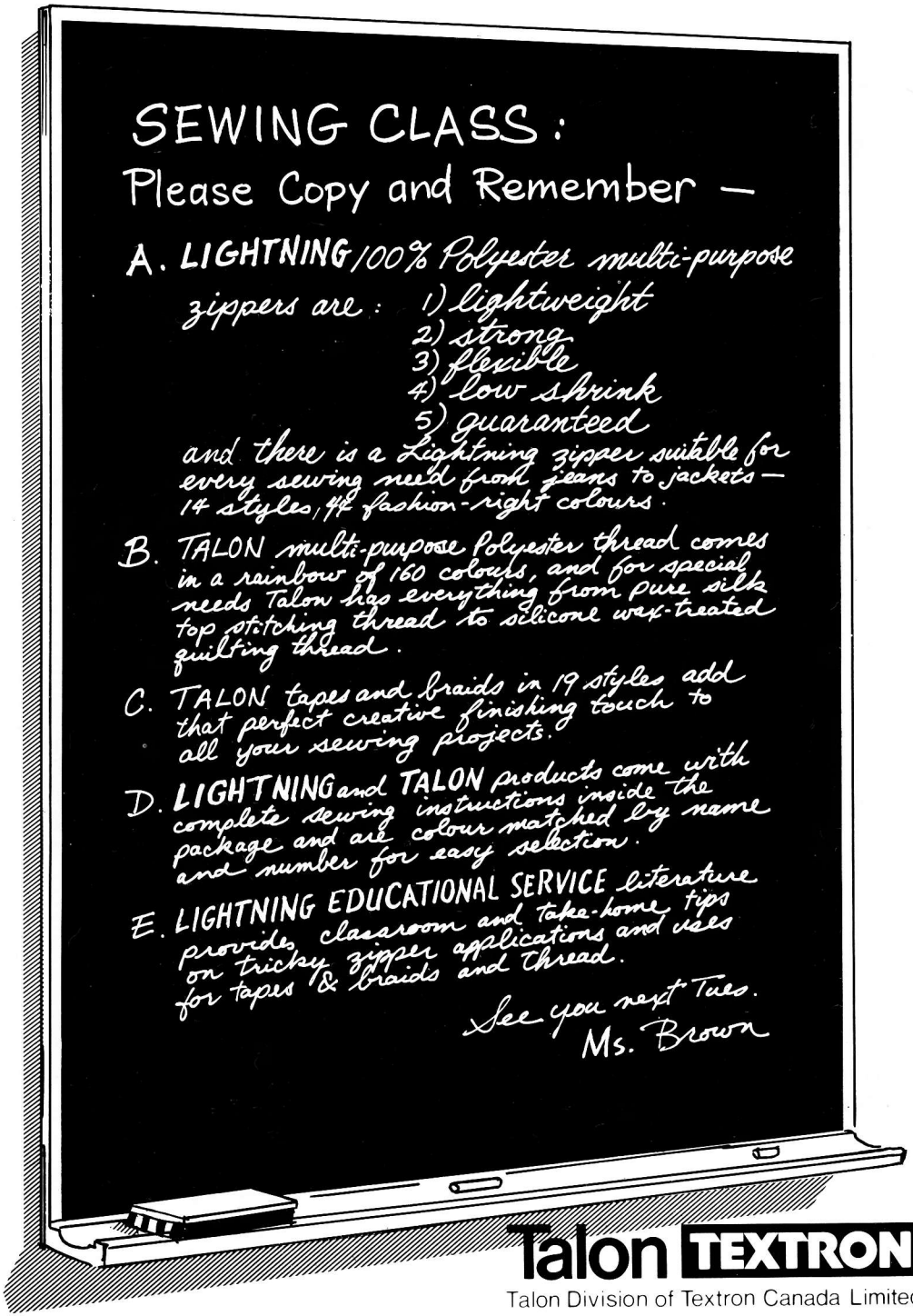
At the last count the Canadian Home Economics Association numbered two thousand and fifty members (2050)! That is an all-time high. We can be very pleased at this achievement. The feasability study of 1973 talked about the "relative stagnation" of the Association. At that time the membership stood at one thousand one hundred and forty-one (1141). The present membership represents an 80% increase in four years.

That same report estimated a potential membership of thirteen thousand, eight hundred persons! So before we think our growth looks good we should note that the present member is only 15% of what it might be!

On the first of May this year, our fees increased to $50.00. The challenge to CHEA for 1977-78 is to obtain 100% renewal of the present membership and to make inroads on that 85% of non-members. Please pick up the challenge. A live, healthy Association needs new and dedicated members. The "each one get one" pledge of last year's convention remains our challenge. Good luck in getting your "one".

Your president.

Doris R. Badir
President C.H.E.A.



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EXECUTIVE DIRECTOR'S MESSAGE

All Associations are formed to accomplish certain purposes, primarily for the benefit of their members. In the 1975 revisions to the C.H.E.A. Constitution, this Association showed some outward-looking concepts in its Aims and Goals as well as stating the need for improved communications between various groups of home economists. The first Goal refers to professional standards, and this year each member was asked to fill out a questionnaire for the Professional Development Committee. A meeting to discuss your answers and concerns will be held during the C.H.E.A. Conference in Winnipeg.

Another Goal refers to developing positions and issues and this can be accomplished through the Resolutions process now established in C.H.E.A. As home economists, we are somewhat fragmented in our career choices and yet we can and do exhibit common ideals, particularly in the improvement of the quality of life in this country and elsewhere.

Some professional associations concentrate solely on benefits for their members in the way of standards, fees recommendations and the guild-like manner in which they operate. Governments are beginning to examine the functions of these associations as well as their impact on society.

Responding to questionnaires, developing resolutions and improved communication are some of the means that C.H.E.A. members can use to further our goals.

Nola Wade

Nola Wade

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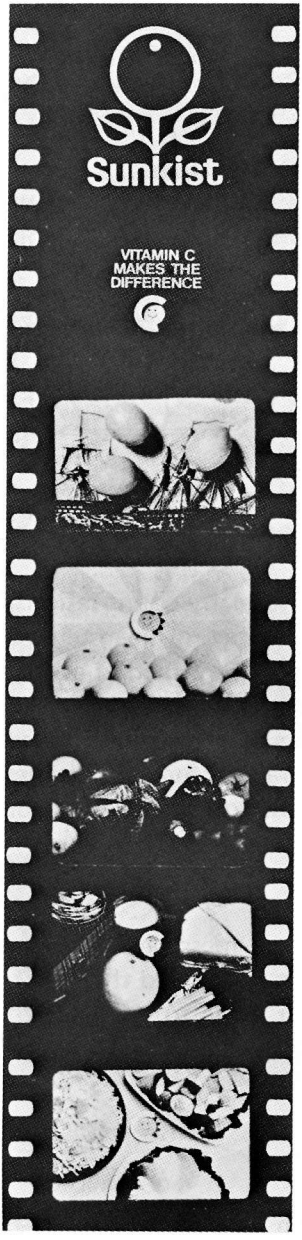

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FROM THE EDITOR'S DESK

It is ten years since the Journal moved from Winnipeg. During those years, we have seen many changes in the Association and in society. It has been an interesting ten years — if at times frustrating and very time consuming. Most of the members of the editorial board held full time jobs and the Journal was an "extra" — but a rewarding one.

Our sincere thanks to all members of the C.H.E.A. who assisted us through the years, and a special thanks to all who have served on the editorial board.

And to the new editorial board, our very best wishes.

FROM THE *NEW* EDITOR'S DESK.

The phrase — "from the editor's desk" — can have many connotations. For C.H.E.A. in 1977 it means movement from east to west, it means a new masthead, and it means some misgivings. So far, the movement has not surfaced any problems. The west is pleased to have this opportunity to share in the activities of the association. The members of the new masthead have already indicated high interest in producing the fall journal. Nevertheless, we have an excellence to match in accepting this torch and only our success or failure will debit or credit our misgivings.

In the meantime from the Editor's Desk there is a message of sincere thanks to the former editors Jane Hope and Margaret Smith and their journal staff for the generous contribution that has been made to this facet of our professional association. Your past success is an inspiration to the "new crew".

Edith Down
C.H.E.A. Journal Chairman

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(Dept. of Education)	— contact Sharon Pisesky Edmonton Catholic School System
H.E.I.B.'s — Breakfast Meeting contact Kay Spicer	— Tuesday, June 30
I.F.F.H.E. — Breakfast Meeting	— Thursday, June 30
C.U.T.H.E. — Breakfast Meeting	— Thursday, June 30

"CIRCLE THESE DATES"

June 13-15, 1977 Consumers Association of Canada, Annual Meeting, University of Guelph, Guelph, Ontario.

June 20-23, 1977 Canadian Dietetic Association Conference, Skyline Hotel, Ottawa. . . "Energetics in Dietetics".

June 26-27, 1977 Canadian Home Economics Pre-Conference—Winnipeg.

June 27-30, 1977 Canadian Home Economics Association, Holiday Inn, Winnipeg . . . "Take Stock—Take Action".

June 27-July 1, 1977 American Home Economics Conference, Boston, Mass.

November 4, 1977 Edna W. Park Lecture . . . University of Toronto

November 5, 1977 Symposium—"Nutrition Toronto", University of Toronto.

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CANADIAN HOME ECONOMICS ASSOCIATION
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Consumerism — Whither Home Economists?

by Rosemary McRobert, TI Home Economics Award winner
As published in Gas World, December, 1976 (England)

Is there such a thing as consumerism? If there is, it is like most other "isms", an awareness mainly to the people who feel it. It doesn't exist as a philosophy. If you have to define consumerism the most you can say is that "it is a countervailing attitude to the way in which the consumer is regarded in an economic and social context by suppliers", or "by the market place" or whatever else you want to say. So that rules out "consumerism" as a matter of importance for most of the population of the UK.

"Consumerism — whither the home economist" as a challenge would not make a subject for a leader in *The Times* or an editorial in the *Daily Mirror.* It embraces a specialised and particular area of concern to a few thousand people if it is a theme to be developed round those two specialist terms — "consumerism" and "home economics".

HOW HOME ECONOMISTS CAN HELP

An essay to define the role of the home economist in the hubristic innocence of the world of the professional consumer? No thank you. What is interesting and what could be important is how home economists can contribute to the way in which "the consumer" is regarded and catered for in our economic and social climate.

No preaching, no consumer orthodoxies. Just a look at where people, most people, are and where they want to be in their role as consumers and how home economists can help them.

NOVEL PROPOSITION

This means starting with what for some professional consumers is a rather novel proposition. That the majority of suppliers don't set out to rip off, con and generally do down the people they sell to. They may compromise, cut corners, economise, rationalise, temporise and generally accomplish all the other shifts that have to be accommodated in an ever-changing market place.

All suppliers are not fundamentally dishonest but a frightening number are fundamentally short sighted. What characterises a developing company with a determination to have a stake in the future is the ability of management to distinguish short-term commercial advantage from a planned long-term strategy and programme.

If home economists are used in industry simply in short term, *ad hoc,* jobbing tactical duties, the slightest change of policy or objective finds them blown on to a different course or out of the door altogether. The only role worth bothering about for home economists in industry lies in the contribution they make to the social acceptability of the company. They are part of the acceptable face of the manufacturing and distributive industry or they are nothing.

Since "consumerism" must also embrace the concept of consumer education, the home economist as teacher must also be asked "Whither? " Unless she takes more initiative and develops more political muscle in this area she will find that consumer education is "allocated" by consumer organisations (those middle-class missionaries to consumers) in the academic subjects which are the only ones they know about and respect. But perhaps "Whither home economics teachers" is another subject.

NOW – A THIRD AREA

There is a third area for the home economist. One which is only just opening with the provision of local consumer advice centres. Only just opening because it is characteristic that the consumer organisations have not been persuaded that the practical contribution of the home economist is one that should play an important part in their development.

The director of Consumers' Association, Peter Goldman, thinks of home economists as tiresome woman who pronounce the "g" in margarine hard. Most people who work in consumer organisations find it much more interesting and challenging to concentrate on the intellectual content of "consumerism". They do not think much of industry or suppliers. They are not too happy about the practical problems that face the consumers of their information – the performance of a dishwasher, or cooker, or food mixer.

The social and ethical implications of misleading advertising and the moral implications of selling a product which is not safe, grab them. Someone has to do the basic testing, but the gloss that is put on testing, the interpretation of the results, the writing of the report, the production of evidence for an improvement in legislation – you don't need practical people for that, you need a trained mind and intelligence. A good honours degree. A good honours degree distinguishes anyone from about 90 per cent of the rest of the population. That is the trouble with professional consumers.

If the home economist really wants to make a contribution to the consumer cause, the only place to do it is where the action is. Not at the first aid posts of local authorities, not in the professional consumer ghettoes, but in the market place and in the schools.

TWO PROBLEMS TO BE FACED

Any home economist who has experienced the full gamut of consumers and their children, their aspirations, their dottiness, their ignorance, their bloody-mindedness, their unstructured approach to buying, their robustness and their ability not to make the same mistake twice is well qualified to help the bewildered and sometimes bamboozled consumers who visit advice centres. But these people are and always will be a tiny fraction of the people who buy and use products and services.

Rosemary McRobert, direct of the Retail Trading Standards Association, England, and a fellow of the Association of Home Economists, was declared the winner of the fourth TI Home Economics Award at a lunchtime reception on October 6, organised by TI Domestic Appliances Ltd., co-sponsors of the Award with the Association of Home Economists.

Her prize — a cheque for £350 — was awarded for the 3,000-word essay reproduced here, on a subject close to Miss McRobert's heart. Throughout her career with the Consumer Council, the Consumers' Association, the Department of Prices and Consumer Protection and currently the Retail Trading Standards Association, Miss McRobert has always worked for the best interests of the consumer. Her success with the Award is an apt recognition of this. Miss McRobert is seen here being presented with her cheque and a commemorative plaque by Mr. Michael Boughton, chief executive of TI Domestic Appliance Ltd.

There are two problems that face the Home Economics profession. One is the stereotype image of home economists. The other is the lack of an unequivocally professional and specialist and politically adroit approach.

STEREOTYPE IMAGE

First, the stereotype image. Miss Wendy Matthews, the chairman of the Association of Home Economists, in a paper she gave in 1975 to the London and Southern Junior Gas Association, summed up the problem in one sentence, "Stereotypes are easier to accept than to bother to challenge", and in her paper she challenged and demolished the gas industry's view of their home service stereotypes as people who "are never happy away from their cookers".

She said, "A salesman is there to sell appliances, an accountant is there to deal with finance and accounts, a gasfitter's role is clearly understood. The role of the home service adviser — interpreting customers' needs to the industry and trying to explain to the customer the sometimes inexplicable policies of the industry — does not respond to neat labels.

Because of the domestic origins of the basic skills which brought them into the gas industry over 70 years ago and which, indeed, were of prime importance at that time, they suffer too often today from a stereotyped view of what they can do . . . "Some-

times home service advisers are criticised for not co-operating in the stereotyped role that the men in the industry have conceived to be appropriate for them. Their professionalism has not often been adequately recognised".

For home service adviser read "home economist" and Miss Matthews' observation can be made in every sphere where a home economist earns her living, whether it is "cookery" in school, in the "kitchen", in the advertising agency or with the manufacturer, or in the "practical subjects" section of a magazine.

PRACTICAL APPROACH TO LIFE

The second problem lies in the essential practical approach most home economists have to life. They really do want to get on with doing things and are not attracted by the possibility of developing political muscle, in the way consumer organisations have developed their political muscle. That is rather nice, but it is also possibly a rather nice way to obscurity. In the UK there are two major professional organisations concerned with Home Economics. They are the Association of Teachers of Domestic Subjects, which is concerned with teachers only, and the Association of Home Economists, which was set up in the 1950s because the ATDS did not concern itself with the home economist employed outside teaching.

So there is no strong organisation which develops the professional and specialist approach for Home Economics as a whole. In the United States and most other countries there is a specialist organisation with the strength of purpose to project the specialisation rather than the particular employment interests of sub-groups.

RELEVANCE OF SPECIALISATION

They have their problems too, but it is significant that while consumer organisations are beginning to show are the decades of elitism in their attitude to consumer affairs, the home economists in the States are coming into their own in education and industry as the relevance of their specialisation to "real life" is perceived, to the robust problems of the market place, to the way people are and want to be, not the way the professional consumers think they ought to be.

If home economists are going to have an important future some positive, structured, joint co-operative initiatives stemming from working parties of representatives of the professional organisations seem essential. As relations between the organisations are very good, it is extraordinary that nothing has been done to set this up.

Home economists can regard the consumer movement as a useful ally. They have used their political muscle to focus the importance of the consumer as a force in our economic and social life. They have made self-evident a truth recognised by everyone who has ever made a bad purchase or been sold the wrong product.

That for too long the market place was out of balance and that the simple justice that the person who parted with his hard-earned cash should have a say in the supply of goods and services was being denied.

There is a danger now that the pre-occupation of the last 20 years is achieved of getting the market place in a better balance, of acknowledging the needs of the consumers, of promoting the concepts of better information, improved safety, more responsive complaints systems, and organisations to oversee fair trading. The danger is that the work of consumer organisations is becoming too specialised and too elitist.

The obvious things are done. What needs to be done next? Perhaps, in spite of the evidence of the attitudes of people towards owning "things" wanting to improve their standard of living (ah, you mean their *material* standard of living), the lines to pursue

would be "non-consumption" and the people to concern oneself with and represent are the non-consumers.

LEGITIMATE EXTENSION

This is a perfectly legitimate extension of the role of consumer organisations but it is a different role and any home economist who wants to bring her skills and experience into it should recognise that it is not the mainstream of consumer experience.

Let me put it this way. The ordinary consumer, who does have a daily, nagging problem of meeting bills and coping with life, would find some of the priorities of consumer organisations with products rather strange. But nothing like as strange as the concept that the role of consumer organisations is primarily to look after people who can't or won't pay their bills on the basis that those who can look after themselves.

The area where energy is needed in consumer affairs is in developing products, instructions, systems of dealing with complaints, ways of finding out and responding to people's needs through ordinary, everyday goods and services. In this way every customer benefits, not just the consumer who needs to have help in resolving a complaint or dealing with a problem.

All this was recognised in the Association of Home Economists book "Money Sense", an attempt to put at the service of people dealing with consumers the practical knowledge and experience of home economists. Long before the trendy National Consumer Council banged on about the problems of people on a weekly income paying their fuel bills, this booklet said "Someone who has always been paid weekly, who has always been accustomed to paying out a weekly rent, using a pre-payment meter for gas and electricity and who is suddenly faced with monthly or quarterly bills, can find it a very hard adjustment to make.

"Low income earners, paid weekly, are hard put to it to use alternative systems". Well, you wouldn't think that came out of *Money Which?* and it didn't. That is not to say that *Money Which?* isn't excellent of its kind. It is. But it is not for the ordinary consumer, the mass market, the market place — however you want to describe it.

No one thinks that the traditional skills of the home economist are the most important skills today. Anyone who has looked at the syllabus breakdown for a typical three-year diploma course in Home Economics can see that: Applied biology, chemistry, physics, mathematics; food and nutrition; house equipment and materials study; social and liberal studies; business administration; communication technique; consumer studies.

It may look hopelessly general. In some ways it is. But that is what being a consumer is — a generalist. And the consumer side of life is low down on most people's list of priorities.

The point is that only the home economist sets out on a career that is involved with the way in which people manage their role in the family as the basic consuming unit. They don't set out to deal in particular with the deprived and the disadvantaged. They do not set out in their professional lives with a burning mission to change history, for the sake of change.

The recognisable and particular skills of the trained home economist are basically directed towards helping people with the practical issues of living in their homes and communities.

It is in developing these skills in industry, in communications, in education and in the social services that home economists can make a contribution to consumers. Not, really not, in the theoretical world of "consumerism".

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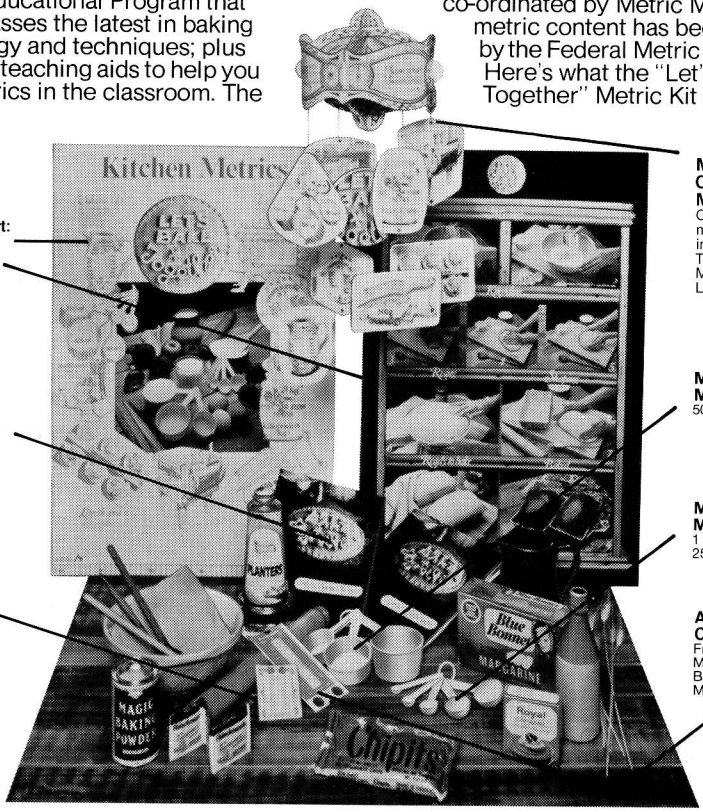

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Decision-making Power of Arthritic and Physically-able Homemakers

by Patricia K. Marshall, M.Sc., Senior Research Assistant, Centre for Educational Disabilities, University of Guelph, Guelph, Ontario

and Mary E. Singer, Ph.D., Professor in Family Studies University of Guelph, Ontario Who supervised the project for a Master's thesis

This investigation was supported in part by the Research Advisory Board Association Grant from the University of Guelph and the Canada Council General Research Grant administered for Canada Council by the University of Guelph.

ABSTRACT

Professionals who are involved with families need to understand how management in the home may be altered when a family member is physically-disabled. This study was designed to provide insight into decision-making power within families in which the wife-mothers were disabled from the effects of arthritis.

The data were collected by questionnaires which yielded the following results: there were no significant differences between the decision-making scores of the two groups of homemakers; there was a trend, however, for arthritic homemakers to possess more power than their hushands in family decision-making; no significant relationship was found between the decision-making power of the arthritic homemakers, and the number of years of their disability; a significant relationship existed between the decision-making power of the arthritic wives and the number of years they had been married. As the number of years of marriage increased, the power scores of the arthritic wives increased; arthritic homemakers received more help from their husbands; indication of no differences in the number of community organizations, community facilities, and social activities engaged in between the two groups of homemakers. However, the social activities engaged in by the arthritic homemakers and their husbands were fewer after the onset of the wife's disability; family resources were significantly fewer for the arthritic families than for the physically-able families; no differences were found in goal attainment of the two groups of homemakers.

Key Words: Management; handicapped; disabled; homemakers; arthritis; decision-making power.

INTRODUCTION

It is a well-known fact that wife-mothers are concerned with the everyday well-being and happiness of their husbands and children. In order to achieve and then maintain a pleasant and comfortable family environment, it is essential that homemaking activities be performed daily. The question which arises is: how is management in the home altered or influenced when a homemaker is physically disabled? What problems will the family encounter when a homemaker is so severely handicapped that she cannot manage to cope with her homemaking responsbilities?

Thus far, little attention has been paid by researchers towards the impact of illness and disability on the social relationships within the family, especially to the situation which arises if the disabled member is the home-maker. Family living specialists need to be included on a professional team to help homemakers and their families who have special problems within the home. This area constitutes a major concern for all those involved in the field of the social behavioural sciences.

May et al. (4); Schwab (5); Christopherson (1); and Malick (3) have indicated that homemakers represent the largest group among the disabled population, and that home-making is a neglected area, especially in the rehabilitation field. Malick (3) expresses this lack of attention to disabled homemakers by stating:

> A large segment of the population, namely the NEGLECTED MAJORITY, is the handicapped homemaker or home manager. This NEGLECTED MAJORITY, has received the least attention, evaluation, education, training, re-training, and follow-up of any vocational group . . . yet this NEGLECTED MAJORITY directly affects every member of our family for a large segment of their lifetime. The homemaker daily affects each member of every family unit every day of the year.

One specific disability that is of marked concern to many homemakers and their families is arthritis which is generally characterized by physical handicaps. This disease is by no means rare amongst Canadian homemakers.

A recent survey conducted in five areas of Southern Ontario by Spitzer et al. showed that the rate of arthritic complaints in free-living general populations range from 6.23 percent to 8.84 percent. Forty-three percent have continued to use health services at costs of 78 percent higher than the average expenditures in the same communities[6]. This led to a concern for what happens to management in the home where there is an arthritic homemaker in the family.

METHODOLOGY

This study was designed to provide insight into decision-making power within families in which the wife-mothers were disabled from the effects of arthritis. The sample consisted of 50 families: 25 families with an arthritic homemaker (experimental group); and 25 families in which there was no arthritic homemaker (control group), whom the authors identified as physically-able homemakers. Power, was defined conceptually as " . . . the potential ability of one partner to influence or control the other's behaviour". Operationally, power in decision-making was measured by the number of decisions a family member made or participated in making which affected another individual's behaviour.

The sample selected had to conform to the following predetermined criteria:

(1) the families had to be intact with at least one child, either at home or within a 100 mile radius so that family visits could occur frequently;

(2) the husbands were employed full-time*;

(3) the homemaker was not over 65 and had to be a full-time housewife (that is, not working outside the home); and

(4) the families had to be living within a reasonable driving distance from Guelph, Ontario, Canada.

Consent from both the husband and wife was essential in order to participate in the study.

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*with the exception of two men who worked part-time

The 25 families with homemakers who had arthritis were located through the assist ance of the Medical Director of the Rheumatic Diseases Unit, at the University of West ern Ontario Hospital, London, Ontario. The head nurse of this same unit, searched th nursing Kardex files weekly to select subjects who met the described criteria. Thirteen families with arthritic homemakers who were in-patients were obtained and the re maining 12 families with arthritic homemakers were located through the out-patient files.

The names of the physically-able homemakers, who acted as the control group were found by contacting companies in the yellow pages of the telephone book. Th personnel in these companies were asked if they would assist in locating families wh met the pre-determined criteria.

The subjects in the control group were paired to the arthritic families by matchin the husbands' occupations and the types of dwellings of the families. It was also at tempted to compare families in which the age of the physically-able wife and her hus band corresponded with the age of the arthritic wife and her husband as nearly as pos sible. The arthritic homemakers mean age was 49.04 years while the physically-abl homemakers mean age was 47.28 years. The husbands whose wives were arthritic had mean age of 52.28 years, while the husbands whose wives were physically-able had mean age of 49.64 years.

The data were collected by interviewing the husbands and their wives in thei homes at a pre-arranged time. The wives in all the 50 families were interviewed by on researcher, while the husbands answered the questionnaire of the other investigator With the exception of the background information section, the husbands and wives wer interviewed simultaneously in separate rooms. This avoided comparisons of answers, an speed up responses. The time required to administer the questionnaire was ap proximately one hour.

DESCRIPTION OF THE RESEARCH TECHNIQUES

Husband and Wife Questionnaires — The questionnaires for the husband and wife wer identical except for a few additional questions at the end of the questionnaire for th wife. The physically-able homemakers' questionnaires were similar to those of the fam ilies with an arthritic homemaker, with minor revisions and a few dummy question inserted.

Measure of Decision-Making Power — The homemakers and their husbands wer asked to answer 15 questions dealing with family activities, in order to measure thei power in decision-making. First, these 15 questions were asked to identify who wa thought to make the decisions. Secondly, the same 15 questions were asked again, thi time to determine who actually carried out the decisions. The decision-making powe score was computed for each question based on Hook's dissertation (2: 92-95). Th overall power in decision-making was determined by totaling the item scores for each o the 15 questions answered.

RESULTS

Within the confines of this study which compared 25 arthritic homemakers and thei families with 25 physically-able homemakers and their families, the following result were obtained, based on the hypotheses postulated.

1. (a) A chi-square goodness of fit test was the statistical treatment used to determin the difference between the power scores of the arthritic homemakers and thos of the physically-able homemakers. The results of this treatment revealed a ch square value of 1.96, with 2 degrees of freedom, which was not significant a

the .05 level. Therefore, the homemakers' power in decision-making did not differ significantly between the two groups.

(b) The decision-making power of the arthritic homemakers did not increase as the number of years of their disability increased. The calculated F-value was 0.94. However, the tabular F-value was 4.28, with regression degrees of freedom equal to 1, and error degrees of freedom equal to 23.

(c) The decision-making power of the arthritic homemakers increased as the number of years of marriage increased. The F-value when calculated was 5.17, whereas the tabular F-value was 4.28.

2. There was no significant difference between the two groups of homemakers, with respect to the amount of help received with household activities from their children. However, arthritic homemakers received more help from their husbands.

3. The number of community organizations, community facilities, and social activities engaged in did not differ significantly between the arthritic and the physically-able homemakers. This conclusion was based on chi-square goodness of fit tests. However, the social activities engaged in by the arthritic homemakers and their husbands were fewer since the onset of the wive's disability. The chi-square value was calculated to be 9.74, which is extremely significant at the .05 level, with 1 degree of freedom. The critical chi-square value was 3.84.

4. Detailed chi-square goodess of fit tests revealed no significant differences (between the arthritic homemakers and the physically-able homemakers) in the ability to meet financial situations during the past year. There were no differences in adequacy of resources available for keeping the home in the desired condition, and caring for family members, before and after the onset of the disability for the arthritic wife, as compared to three years ago and now for the physically-able wife. A significant difference did exist, however, revealing less adequate resources in providing desirable family meals where the homemaker was arthritic. These comparisons of the "before and after" situations were made using the T-test.

5. When reviewed as separate goals, by extensive chi-square goodness of fit tests, there was no significant difference between the attainment of goals for the arthritic and for the physically-able homemakers. In addition, when the goals were grouped together, there was no significant difference between the overall goal attainment of the arthritic homemakers and the physically-able homemakers.

SUMMARY

The most effective weapon to combat the problems of disabled homemakers is the development of more intensive multifaceted rehabilitation programs. As Family Life graduates, we must work as an interdisciplinary team with disabled homemakers so that the family unit can remain as the central goal. To date, the disabled family and its individual members have been a minority and neglected group. Disabled homemakers should be encouraged to plan their way of life within their physical limitations, and to develop a positive attitude which allows them to achieve their family roles, despite their disability.

Acknowledgments: The authors wish to express their special thanks to Dr. Manfred Harth, M.D., F.R.C.P. (C), Director of Rheumatic Diseases Unit, University Hospital, University of Western Ontario, London, Ontario who cooperated in every way to provide the necessary subjects for this study. Also Mrs. Doris Astbury, Head Nurse Rheumatic Diseases Unit, for searching the nursing Kardex files for suitable candidates, and briefing them on the nature of the study.

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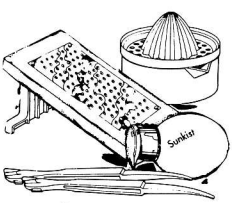

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Ingestion of Raw Egg White

by Shirley Rebus, Marketing Home Economist, Canadian Egg Marketing Agency

OVERVIEW

Biotin is one of the B vitamins. In tissues and in foods it is usually combined with protein. Avidin is a protein (found in raw egg white) which combines with biotin, making it unavailable to the body.

Should raw eggs be avoided in the diet because of the presence of avidin? There is no evidence to suggest that a moderate intake of raw egg white would create a biotin deficiency.

The average daily diet provides sufficient biotin to meet daily requirements. In addition, biotin is manufactured within the body by intestinal bacteria.

The egg itself contains enough biotin to combine with half of the avidin present. In the body of a normal, healthy individual, it would be expected that there would be ample biotin to combine with the remaining small amount of free avidin without creating a deficiency.

Only a few cases of biotin deficiency have been reported. These were all instances where intake of raw egg white was high (6-59 egg whites per day) and the overall diet was low in biotin. Other studies report that deficiency symptoms were not induced by similarly large intakes. Biotin deficiency has never been observed in individuals consuming typical diets.

In summary, the amount of egg white that needs to be ingested to cause a deficiency is far in excess of the number of raw eggs that would normally be eaten in a day.

BIOTIN

IDENTIFICATION

Biotin is one of the B vitamins. In tissues and in foods it is usually combined with protein. Biotin is a coenzyme of a number of enzymes that participate in carboxylation, decarboxylation and deamination reactions. Biotin was identified through animal studies in which quantities of raw egg white were fed as the source of protein. Animals on such a diet developed deficiency symptoms; this was termed "egg white injury". It was observed that there was a factor that could protect experimental animals from egg white injury. This was first called vitamin H, and later identified as biotin.

Later it was shown that egg white injury was caused by a protein (avidin) found in raw egg white. Avidin binds very firmly with biotin, creating a large molecule that is not utilized by the body. It was observed that avidin is deactivated by heating.

SOURCES

Dietary Sources

Biotin is widely distributed in our foods. Liver and other organ meats, yeast, egg, mushrooms, legumes, molasses, chicken and milk are all sources of biotin.

Production Within the Body

In addition to being provided by a variety of foods, biotin is synthesized by bacteria present in the large intestine. Balance studies in man (20) found that fecal excretion of biotin was higher than dietary intake in all cases, and urinary excretion also frequently exceeded dietary intake.

It is suggested (1, p. 810) that "For man and some other animals, the biotin produced by the bacteria of the large intestine may be a more important source (quantitatively) than that of the diet."

HUMAN REQUIREMENT

The very widespread occurrence of biotin in a variety of foods, as well as synthesis by intestinal bacteria, makes it difficult to establish the biotin requirement of man. It is estimated that the usual biotin intake is in the range of 40-300 μg per day.

HUMAN DEFICIENCY

Because of intestinal synthesis, biotin deficiency has not been created simply by feeding a biotin-free diet. Deficiency has occurred in some cases when large amounts of raw egg white (avidin) were ingested over an extended period of time. Deficiency symptoms can also be induced by a low-biotin diet in combination with antibiotic drugs which destroy the intestinal bacteria.

Symptoms

Symptoms of human biotin deficiency include desquamation of the skin, lassitude, muscle pain, and loss of appetite.

Attempts to Experimentally Induce Deficiency

The first induced human biotin deficiency was reported by Syndenstricker (21, 22) in 1942. Four subjects were fed a diet in which 30% of the total calories were supplied by egg white. (The 928 calories supplied meant that the equivalent of 59 large eggs were fed per day.) The diet contained little biotin. The individuals exhibited deficiency symptoms after 7-8 weeks on this diet. Symptoms disappeared when 150-300μg of biotin were administered daily.

However, other investigations (23, 24) have not confirmed the production of human biotin deficiency symptoms by feeding egg white or avidin concentrate.

Kaplan (23) reports experimental work to determine whether avidin would be effective in reducing growth of cancerous cells. Patients were given large doses of raw egg white or avidin concentrate as follows:

	patient	number of egg whites received	period of time (in days)
1.	43-year-old male	11,466	289
2.	60-year-old male	6,846	266
3.	64-year-old male	1,092	26
		then 271,476 units avidin	
4.	28-year-old female	3,042	136
5.	44-year-old male	14,522	75
6.	68-year-old female	8,148	371
7.	50-year-old female	9,354	207
8.	64-year-old male	12,564	238
			315

The author notes that they were " . . . unable to produce biotin deficiency in our patients even by the employment of pure avidin in the amount of approximately 2000 units per day."

CASE HISTORIES OF BIOTIN DEFICIENCY

Few cases of biotin deficiency are reported in the literature.

1. A 5-year-old boy, unable to swallow due to paralysis, was fed a food mixture by tube (25). This mixture included 6 raw eggs daily over a period of 18 months. In addition, the child was given almost continuous broad-spectrum antibiotics. This may have contributed to the deficiency by suppressing endogenous biotin production. Manifestations of deficiency came on late and gradually. When egg white was withdrawn and biotin administered, the condition cleared rapidly.

   Biotin was then withdrawn and egg white again added to the food — this time boiled 2-4 minutes. No relapse of symptoms occurred.

2. A 62-year-old female with cirrhosis of the liver ingested 2 quarts of skim milk and 6 raw eggs daily for 18 months (26). This diet had been prescribed by her physician as a high-quality protein supplement in an attempt to aid regeneration of liver cells.

   The woman developed deficiency symptoms which disappeared when 200μg biotin were administered daily. Measurement of biotin excreted in the urine suggested that, in this patient, the hepatic cirrhosis prevented the proper storage and utilization of biotin.

3. A 66-year-old man with poor dietary habits has been reported to have ingested, per week, 7-28 quarts of wine mixed with 2-6 dozen raw eggs, for a period of several years (27).

   His general food intake was poor; often he ate only one or two meals a day. Sometimes he had only eggs and wine for a day or two at a time. The food he did eat was mainly canned; rarely did it include good sources of biotin.

   During hospitalization for another ailment, the patient received a well-balanced diet with vitamin supplementation. Deficiency symptoms rapidly improved.

   An attempt to reactivate the dermatitis by giving a low-biotin diet failed. The dermatitis that the patient originally exhibited was consistent with a biotin-deficient state that could have been induced by avidin in the eggs. "However, the lack of a specific therapeutic response and of a failure to reproduce the symptom after it had subsided leaves uncertain the diagnosis of biotin deficiency." (6, p.349)

BIOTIN AND AVIDIN IN EGG

Paradoxically, while the egg white contains avidin, egg yolk is a rich source of biotin. Does the whole egg contain an excess of avidin or biotin? An investigation of the question, reported by György and Rose (28), found that avidin is somewhat in excess of biotin.

An egg contains approximately 12μg of biotin. This amount was bound by approximately half the avidin in that egg. This would suggest that the excess avidin would require another 12μg of biotin to become completely bound.

CONCLUSION

Is it harmful to include some raw eggs in the diet?

There is no evidence to suggest that a moderate intake of raw egg would create a biotin deficiency.

From a clinical perspective, biotin deficiency has been observed in humans only under extreme conditions. No biotin deficiency has been observed on typical diets. Apparently this is due to the fact that biotin is widespread in our foods. (It is thought that the daily diet provides approximately 40-300μg of biotin. Suggested daily requirement is 40-150μg.) Furthermore, biotin is synthesized in the body by bacteria present in the large intestine.

Looking at the egg itself, we see that it contains enough biotin (12μg) to bind with approximately half of the avidin in that egg. The free avidin, it appears, would require only 12μg of additional biotin. In the body of a healthy individual on a normal diet, it would be expected that more than this amount would be available as surplus.

From a practical dietary point of view, the matter is summed up by Corinne Robinson in "Basic Nutrition and Diet Therapy". She says, "The amount of egg white that needs to be ingested (to cause a deficiency) is far in excess of the number of eggs that would be eaten in a day."

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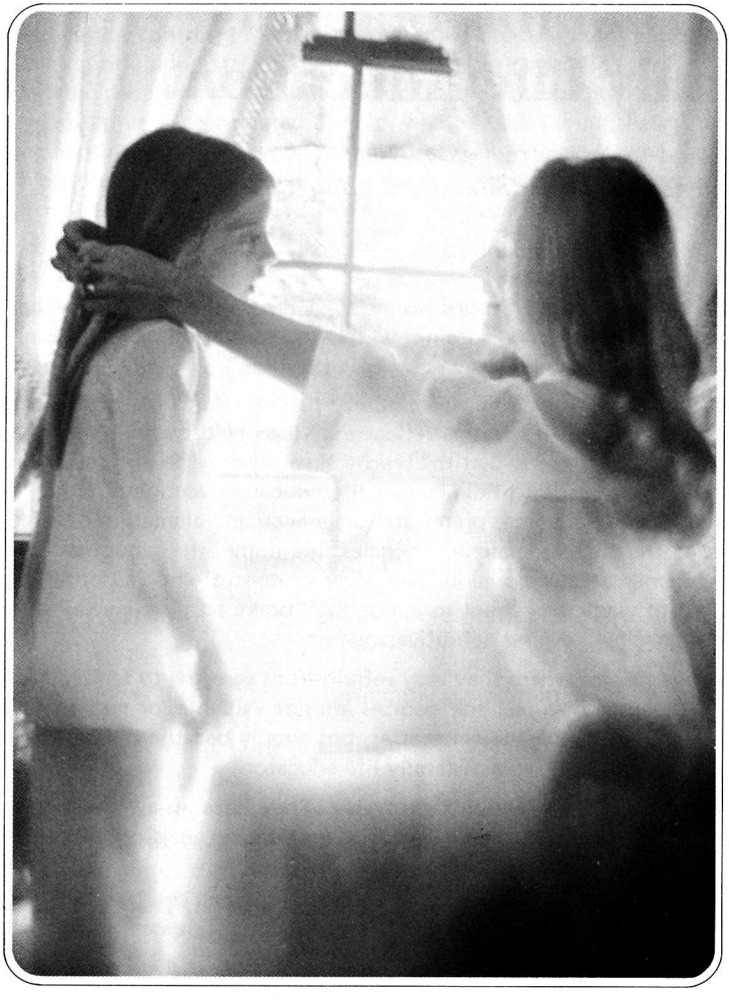

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A Tool for Teaching Family Life Education

by Beverly Pearse Dixon,
Faculty of Education, University of British Columbia

Controversy about the role of Family Studies courses* at the high school level rages. The factions are many. Parents, teachers, administrators, and school board trustees are all concerned.

Parents are ambivalent about their role. Community parent groups are often vocal in their accusation that family studies classes reflect the views held by the teacher in charge of the course. The fear, often, is that the teachers' values may be different from the home values. Attempts are made to hold family life educators accountable for increases in so-called social ills like divorce, premarital pregnancy and alienation of affection.[1] Since the roles of the three socializing agencies, the home, the school and the church are not clearly demarcated, arguments over areas of control and responsibility arise. Parents often seem to want the school to act as the "brake on the runaway train of change",[2] indicating that they have no definitive answers.

Teachers are reaching a point where they may refrain from agreeing to teach a family studies course, not because they feel the courses are not valuable, or not because they feel unqualified to deal with the subject matter, but simply because they are concerned about their vulnerability in the role of family life educator.

Administrators generally wish to avoid controversy. They have an awareness that when a school becomes embroiled in hostility and factions develop, it is probable that the effectiveness of the learning environment decreases.

And, of course, the school trustee is holding an elected position. Therefore, he or she is walking an impossible tightrope between varying opinions.

Probably, the last person to be considered in all of this controversy is the student. Seldom is the student consulted about how she/he feels about exposure to Family Studies courses. Thus, she/he is left with few choices and many needs.

In addition to all the concerns around WHO has the decision making power, if a choice is made to include some form of Family Life education in a high school, there remains the issues of:

- What qualification should teachers have?
- *When* should it be taught?

and – *What* should be taught?

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*Throughout this paper, the terms "Family Life education" and "Family Studies education" will be used interchangeably. For a discussion of the whole area of concern about definition, see (Sommerville; 1972; 284).

[1]Rose M. Sommerville, "Family Life and Sex Education in the Turbulent Sixties" in *Introduction to family life and sex education,* Prentice Hall, Englewood Cliffs, N.J., 1972, p. 301.

[2]Ibid, p. 303.

The purpose of this article is to share *one approach* to the teaching of family studies at the high school level. This technique, called a *PROPOSITIONAL TESTING APPROACH,* would facilitate an atmosphere of empirical truth seeking and, thereby, reduce the controversial nature of Family Studies. Family Studies as an evolving field is seeking discipline status. As this happens, an expanding body of *propositions* or things we think we know about families is being accumulated. These propositions are being organized and inter-related to form what we call *family theory.* An empirical truth seeking approach emphasizes open-mindedness. It involves having the students ask important questions without preconceived answers. High school students are presented with tested propositions about family life and are encouraged to examine them in a variety of ways.

There is a need, if a propositional testing approach is going to be used in the high school, for different teacher training programmes. I worked this summer at the University of British Columbia with a group of 12 qualified teachers who were currently teaching Family Life courses. The purpose of the summer session was to prepare and test a portion of a Family Studies curriculum exemplifying this empirical truth seeking approach. In the six week period, we followed this outline:

Part one:	—	Examining the field of "family studies"
	—	Reviewing trends in "family theory"
	—	Developing a rationale for using a proposition testing teaching model.
Part two:	—	Developing a portion of curriculum based on a proposition testing teaching model
Part three:	—	Testing the curriculum
Part four:	—	Evaluating and revising the curriculum

PART ONE

The first block of time was spent examining Family Studies as an evolving field seeking discipline status. Broderick's definition of the "field" of Family Studies was presented to the teachers. Broderick states that the following are areas of concern under the umbrella concept "Family Studies".

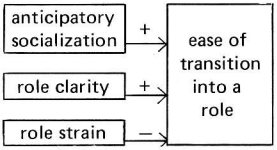
BRODERICK'S "FIELD" OF FAMILY STUDIES

1. The Premarital Dyad
   - A. Sexual Behaviour
   - B. Dating and Courtship Behavior
2. The Marital Dyad
   - A. Communication
   - B. Role Differentiation
   - C. Morale and Stability: Role Perception, Expectation and Strain
   - D. Decision Making and Power
3. The Parent-Child Dyad
   - A. Communication
   - B. Socialization
   - C. Decision Making and Power
4. Whole Family Interaction
   - A. Family Structure and Function
   - B. Family Crisis

5. Family Location in Larger Social System
   A. Cross Cultural Studies
   B. Subcultural Studies
   C. Social Class Studies

6. Family Transactions with Other Elements in Social Systems
   A. Informal Transactions with Kin, Friends etc.
   B. Formal Transactions with Economy, Politics and Other Institutions.

The whole area of family theory was reviewed, using a simple programmed text called *Theory Without Pain.*[3] This booklet gave each of the teachers the following core of terminology from which to work:

Term	Definition	Example
1. Concept	A word or a term that stands for something.	Book/pencil/size of family.
2. Variable	A concept that varies.	Sex (male/female) role strain (more or less of it).
3. Proposition	A statement about the relationship between variables.	The amount of study (variable #1) influences one's grades (variable #2).
4. Dependent variable	In a proposition, the variable that is influenced by the other one is the dependent variable.	Above, the dependent variable is grades.
5. Independent variable	In a proposition, the variable which does the influencing is called the independent variable.	Above, the independent variable is studying.
6. Positive relationship	If a proposition has a positive relationship, when the independent variable increases, the dependent variable also increases and when the independent variable decreases, the dependent variable decreases.	The amount of role clarity influences the ease of transition into a role and this is a positive relationship (i.e. The more role clarity, the more ease.)
7. Negative relationship	If a proposition has a negative relationship, when the independent variable increases, the dependent variable decreases and when the independent variable decreases, the dependent variable increases.	The amount of religiousness influences the amount of delinquency and this is a negative relationship (ie. the more religiousness, the less delinquency).
8. Theory	A set of inter related propositions.	

[3]Hazel Hardy and Margaret Jensen, Theory Without Pain, Mulyilith Series, 1974.

Next the teachers were asked to formulate a rationale for developing a high school teaching unit based on proposition testing. They asserted that although it was not common for students in high schools to be presented with propositions about families, such an endeavor could aid in reducing the controversial status currently attributed to family life education courses in schools.

In developing their rationale, the teachers focused on a 1969 model developed by Christenson.[4]

	Valuing	**Value Free**
Impressionistic	A Argument by Assertion (Polemics)	B Argument by Reason and Logic (Armchair Philosophy)
Observational	C Empirical Proof Seeking (Pseudo-Science)	D Empirical Truth Seeking (Science: Research)

The four quadrants represent four techniques for approaching the whole area of family. Level A involves a value laden as opposed to a value free orientation. Because discussion here is based on impression rather than on reason or fact, controversy results. At level B, the orientation is still an impressionistic one but reason and logic are introduced, thereby giving a value-free climate. Empirical proof seeking is the activity which characterizes Level C. Here a type of pseudo-science results from the exercise of selectivity in observation to prove a particular hypothesis. Finally, at quadrant D science or true research results from observation in a non-selective way as empirical truths are sought out.

The summer school group of teachers felt that Family Studies classes tend now to operate in quadrant A. That is, discussions are often value laden and impressionistic. Arguments result and assertion rather than logic or data presentation becomes the winning route. If, for example, a controversial topic such as abortion is being discussed, at a type A level of operation, little "data" would be used but opinions would be aired freely. The most persuasive or assertive student would often be able to sway an entire class.

The teachers felt that if quadrants A, B, C, and D of the model were accepted as successive improvements on each other, it was logical to identify Family Studies classroom operation at level D as a desirable goal. The teachers defined their goal for the remaining 5 weeks as follows:

> to develop, test, and refine a unit for a high school Family Studies class which uses a propositional testing format and results in a classroom functioning at a quadrant D level of operation.

4Harold T. Christenson. "Normative Theory Derived from Cross Cultural Research," *Journal of Marriage and the Family,* Vol. 31, p. 212.

PART TWO – DEVELOPING THE CURRICULUM

In the second portion of the course the teachers set about developing a portion of a curriculum based on a proposition testing model. From Broderick's "field" item 1A, "The Premarital Dyad: Sexual Behavior", was selected as the one topic to be taught in the pilot project. Premarital sexual conduct is one of the controversial areas covered in Family Studies courses. It was felt that the selection of this topic would facilitate the informal examination of the hypothesis: the use of a proposition-testing teaching model reduces the controversial nature of the subject matter.

Having chosen a topic, the teachers' next job was to decide on the content to be presented in the unit. This seemed an awesome task at first.

In a proposition testing model the content is in the form of propositions. The teachers were faced with the problem of how to review Family Theory literature and come up with a list of propositions centering on their topic, "The Premarital Dyad: Sexual Behavior". The reference text *Social Systems and Family Patterns, a Propositional Inventory*[5] was found to facilitate this process. Goode has made an extensive inventory of current propositions about families, listing them alphabetically by topic. Each entry has a cross-index indicating the source from which it was derived.

The following propositions were selected from Goode's inventory:

PREMARITAL SEX RELATIONS

1. *Age at Marriage*
   a. The later the age at marriage, the higher the incidence of premarital sexual relations.
2. *Class*
   a. The preservation of premarital chastity will tend to be of greater concern to members of the upper class.
3. *Education*
   a. The higher the education level, the less likely is premarital sexual intercourse.
   b. The higher the educational aspirations of the boys, the older they are likely to be before first engaging in sexual intercourse.
4. *Honeymoon*
   a. Couples who have had premarital sex relations are less likely to take a wedding trip than those who have not.
5. *Parent-Child Relations*
   a. The closer the parent-child relationship, the more likely is the child to be chaste before marriage.
6. *Premarital Sex Relations, Attitude Toward*
   a. The more permissive the society regarding premarital sex relations, the less likely it is that men will be more promiscuous in their premarital sex behavior than women.
   b. The more permissive the society regarding premarital sex relations, the more likely it is that persons will have a pleasant reaction to first coitus on the following day.
   c. Premarital relations are more likely to be condoned if the girl does not become pregnant.

[5]William J. Goode, et al. *Social System and Family Patterns: A Propositional Inventory,* The Bobbs-Merrill Co., Inc., Indianapolis, 1971.

7. *Religiosity*

a. The more devout a person is (as represented by frequent or infrequent church attendance) the less likely he is to engage in premarital sexual relations.

8. *Sex Status*

a. Males tend to have more premarital sex patterns than females.

9. *Sexual Adjustment*

a. There is no association between sexual adjustment in marriage and premarital sexual experience.

10. *Urban/Rural*

a. The urban male and the urban female after age 20 are more likely to practice premarital petting and coitus than are their rural counterparts.

These propositions served as the basic unit content. It was decided that the unit methodology would be the testing of these propositions by:

Classroom survey

Information Generation Profile (I GP)

Literature Examination

Film Examination.

Exactly how each of these four processes was used is explained in the description of the pilot project which follows.

PART 3 – RUNNING THE PILOT PROJECT

A group of 12 students entering grade 12 in September volunteered to attend the pilot project sessions. Partial credit for Family Studies 12 was awarded each student upon completion of the unit.

The pilot project began by familiarizing the students with the theory language that the teachers themselves had learned just two weeks previous. The measure of the integration of this information was seen in several ways. For example, soon the pupils were overheard making comments like, "No, I can't play tennis tonight. The amount of tennis I play influences my marks and this is a negative relationship" or "The amount of chocolate I eat influences the number of pounds there are of me – and oh I wish this were a negative relationship."

Next the students were presented with the propositions which the teachers had selected as the core content of the unit. From there the students set about "testing" the propositions.

A. *Classroom Survey*

The students began by doing a classroom survey. They examined Goode's proposition one at a time, with the qualifying terms "more" or "less" deleted. They tried to predict whether each proposition represented a positive or a negative relationship. Then the correct wording of the proposition was revealed and the class discussed the basis on which they had made their predictions and how successful they had been. Background information was presented to the students on each of Goode's propositions. The teachers explained when and where the research for each proposition had been done. It was considered important that the students understand that each proposition was based on examinable research.

B. *Information Generation Profile (IGP)*

The next step in the pilot unit involved the use of an information generation profile (IGP). An IGP consists simply of a short story which is read to an interviewee, followed by a set of questions to which the subject is asked to respond. Working in pairs the high school students selected their interviewees from their own circle of acquaintances. The results gave a widely divergent sample, including a 14-year-old boy of professional parents, an 86-year-old West Coast Indian grandmother, and a divorced single parent father. The structure of each interviewee was controlled. The pairs read the following introductory blurb to their respondents and followed with the questions as indicated below.

THEORY GENERATION PROFILE[6]

We are going to talk about the Jones family and think about some of the situations they face. These are the kinds of things that are likely to happen in many families.

In the Jones family there are the parents and several children. The children are quite different in age. Mrs. Jones' mother and father live quite nearby.

The family lives in a neighbourhood that is much like one around here.

Now, we'll describe the first situation in the family and then we'll talk about it.

#1. The Jones family's income hasn't increased at all this past year and the price of everything keeps going up. Besides, there always seems to be payments to make. Because of this, both parents want to work, but then there won't be much time for the family to get together.

#2. The family keeps very busy and doesn't really get involved with the relatives too much. This causes concern for them because they know that all is not going well for their relatives.

#3. Lately in the neighbourhood there are a lot of robberies, drugs, and talk of people living together without being married. The Jones family is concerned because they want the best for their children.

QUESTIONS[7]

1. "What things *can* this family do to resolve this situation?" (Probes: "What else can they do? Any other things? Anything more?")

2. "And what *should* they do?" (Probes: "What do you think is the *most important* thing that they *have to do?*")

[6]generated from class discussion at Michigan State University, August, 1975.

[7]Georgianne Baker, "Variations in decision rationality among Mexican-descent families". Paper presented at the 66th Annual meeting of the American Home Economics Association, San Antonio, Texas, June 26, 1975, pp. 20-26.

Interviewees' responses provided a raw data source from which the 12 students, working as a unit, could test their propositions. For this unit on "The Premarital Dyad: Sexual Behavior", most of the relevant information was generated from item 3 on the I.C.P. (Lately in the neighbourhood there are a lot of robberies, drugs, and talk of people living together without being married.) The students printed up Goode's propositions on a large poster. Then, each interview team copied quotations from their interviews onto the chart under either "data to support" or "data to refute" headings. Reproduced below is a portion of the results that the high school students developed as a chart:

Proposition being examined	Data to Support	Data to Refute
#5 (a)	18-year-old girl: I think it's OK for people to live together and all that — but mom — she'd freak. I could never do it — cause I really care about her. Some of my friends really hate their moms — so it'd be easier for them."	21-year-old girl: My living with a man before getting married was really hard for my parents — I think it was because my mom and I were so close that she was finally able to accept it — she brought dad "around" for me.
6 (c)	27-year-old mother — I know lots of kids live together now. I guess it would be OK if mine did — but I sure wouldn't want Cindy to have a baby until she was married — that's a whole different thing.	

Class discussion which followed focused on the data students had obtained. The students began to acquire a sense of how one tests propositions on the basis of field work.

C. *Literature Examination*

For the next step in the project the teachers had the students turn to another data source: the world of literature.

A literature approach to the teaching of family studies has been carefully developed by Sommerville (1964, 1966, 1971, 1972, 1974) and others have supplemented her work (Begner 1972, Channels 1971, Clear 1966, Kenkel 1969, Smarden 1966, 1973). Sommerville's premise is that literature can offer material for analysis[8]. Literature Examination had advantages over the classroom survey and the T.G.P., when time and cultural variations are considerations. Whereas the information generation profile restricted the high school students to their own culture and their own time frame, when they approached literature as a data base, their scope became broader.

8Rose M. Sommerville, Introduction to family life and sex education, Prentice-Hall, New Jersey, 1972, p. 188.

In the pilot project, the class dealt with four novels, chosen for the reasons coded below:

NOVEL	VARIANT PROVIDED
1. Margaret Lawrence, *The Diviners*	time variant — 1940-1960 on Canadian prairies
2. Doris Lessing, *A Proper Marriage*	time and cultural variants — South African white upper class, early 1900's
3. Anne Frank, *The Diary of a Young Girl*	time and cultural variants — Jewish German culture, World War II
4. Carolina Maria de Jesus, *Child of the Dark*	cultural variant — description of life in the Sao Paulo slums

The high school students were divided into four groups, each one dealing with a different novel. Once again, the unit propositions were printed down the left hand side of a large poster. Each group of students printed in quotations from their novel which they felt refuted or confirmed specific propositions.

In the process of discussing the data that the novels provided to verify or refute their propositions, the class began to see how, as norms differed at different times and in different systems, behavior was modified. The teachers felt that insights at Christenson's higher levels of scholarly sophistication seemed to be occurring.

D. *Film Examination*

The final method of proposition testing involved using film as the raw data source. The same advantages found in Literature Examination applied to the use of film — the feasibility of time and cultural variation and the opportunity for examining interrelationships between systems. A limitation is that the student must glean his data on one viewing. In the pilot project, the teachers showed a National Film Board production *Courtship.* This film looks at courting customs in Sicily, Italy, Iran and Canada, thereby providing a cultural variant for proposition examination.

Each student was responsible for tuning in to data on a specific proposition as the film was shown. Again, data was printed onto wall charts, so that patterns of confirmation or refutation of the proposition were visually evident.

The pilot project unit was summed up by totalling the data from the classroom survey, the IGP, the literature and the film examination, and discussing the patterns which emerged.

SUMMARY

The introduction of proposition "testing" to the high school Family Studies classroom is *one* approach and it presents some challenges. The major one is the development of special training programmes for classroom teachers who can feel comfortable with this approach. Teachers would require expertise in theory approaches to the teaching of the family and the resources to support the students' independent research adventures.

We discovered that grade 12 students, perhaps because of their experience in the "hard" sciences, *are* equipped to work within a *theory testing construct* in a social science. When a facilitative environment was provided, they could move discussions about sexual behavior in the premarital dyad out of a value laden, closed format into one of careful and considered examination of propositions. The results suggest that the inclusion of proposition testing in high school Family Studies curricula warrants further consideration, as an approach which focuses on learning more individualized problem solving of complex human problems.

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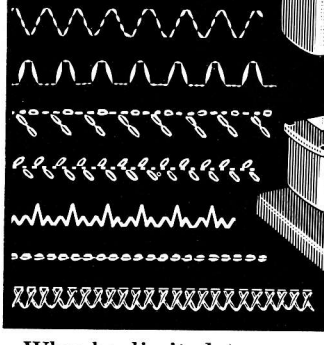

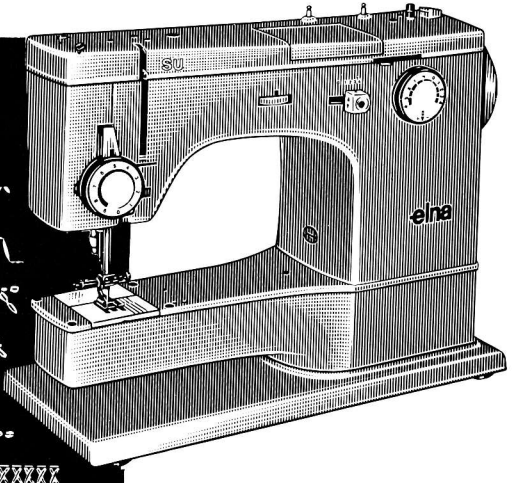

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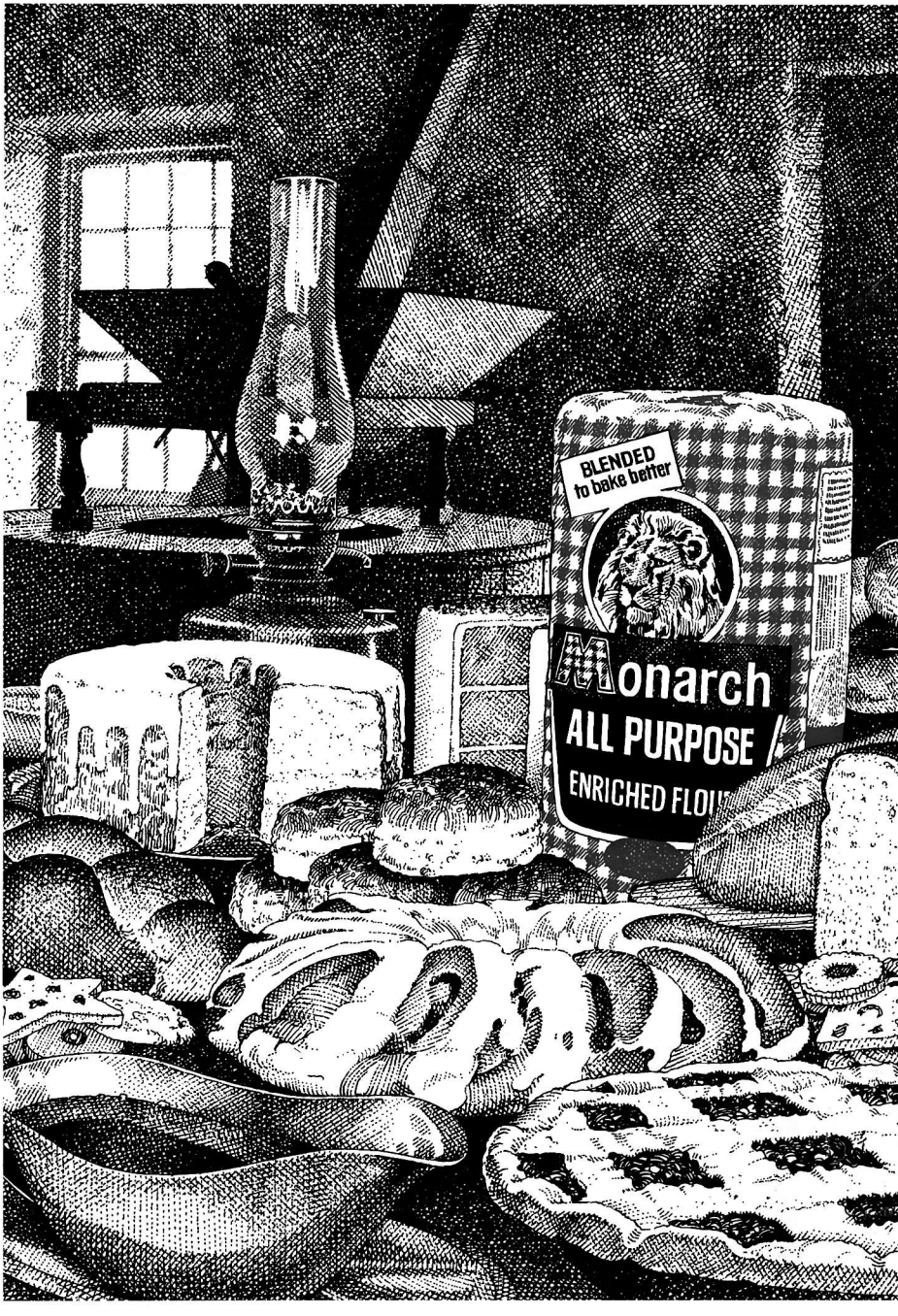
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Metric Update — CHEA Metric Committee

by Wendy Sanford

TAKE ACTION AS A CHANGE AGENT

'The Home Economist As A Change Agent' — the topic of the pre-conference session is most opportune. Swing into action and meet the challenge of change to the metric system.

Everyone needs to become familiar with using the SI metric system, phasing it into everything we do. As leaders in the community, in education, and all the other facets Home Economics represents, we have a great responsibility.

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- 'Style Guide For Metric Recipes'
- 'SI and Home Economics — A Metric Study Guide' ($10.00 including resources)
- Metric household measures kit — includes stainless steel and plastic dry and small measures plus a liquid measure ($7.50 per kit)
- 'Metric Guide For Cookware And Bakeware' — published by CHEA for sector 2.23, Cookware and Housewares, Metric Commission Canada, ($2.00 per copy or $15.00 for 10 copies)
- Series of metric information articles in the CHEA Journal since 1974.
- The annual report lists yearly activities.

What have others done?

Various metric activities that have taken place across the country, since 1974. Those we know about are:

Awareness Workshops or Seminars:

In House

B.C. teachers; Alberta teachers; Calgary Board of Education; Regional Ontario teachers; Seneca College; Home Economics Branch, Ontario; Ministry of Agriculture and Food; Consumers and Ottawa Gas; Metric Commission Intersectorial recipe meeting; Fisheries

Services, Environment Canada, Halifax; American HEA – HEIB; U.S. National Educational Conference – project metric.

General

Kitchener CAC.

Home Economics Association meetings:

Grande Prairie HEA; Toronto HEA; Niagara Region HEA; Quebec AHEE; Montreal HEA; Canadian HEA conferences; American HEA, conventions.

Publications:

In House

B.C. Department of Education – Text 'Management and Foods'; Home Economics Branch, Alberta Department of Agriculture 'A Guide To Home Economists Teaching Metric Conversion' (Extension); Manitoba Department of Education – Home Economics Teaching Units; City of Hamilton, Board of Education 'Recipes For A Metric Moment'; Waterloo Teachers – 'Cooking With Metric'; New Brunswick Home Economics Branch, Department Of Agriculture and Rural Development 'Teaching Metric The Fun Way' and 'Metric Update' newsletters; Food Advisory, Agriculture Canada, 'Guide To Recipe Conversion'.

General

B.C. HEA Cookbook – 'Cooking The Metric Way' ($2.25); Food Advisory, Agriculture Canada, 'Come Into The Metric Kitchen' and Monthly Metric Press Releases; Weekend Magazine – Margo Oliver's cooking school 'Metric Ways'; General Mills – 'Metrics In The Kitchen' (kit); Standard Brands 'Lets Bake Together' (kit); Maple Leaf Mills – 'How To Metricook' (booklet); Corning Glass Works Of Canada Ltd., 'Cooking The Metric Way' (booklet), 'Moving To Metric' (kit).

In Progress

CHEA cookbook; Northern Alberta Home Economics Regional Council cookbook; CHEA Education Committee – Metric programmed instruction course.

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Orthomolecular Approach to the Treatment of Schizophrenia, Childhood Psychoses, and Allied Disorders such as: Hyperactivity, Autism, Hypoglycemia, and Sub Clinical Pellagra

by Geeta Ranni Lall, Ph. D., Assistant Professor of Early Childhood and Special Education, Andrews University, Berrien Springs, Michigan 49104

Children afflicted with childhood psychoses and allied disorders suffer markedly in formal learning. Their behavior disorders work against their natural tendency and capacity to learn. Furthermore, their behavior is often bizarre and marked by intense hyperactivity and ritualism. These children have extreme learning, emotional, and social adjustment problems.

Much research has been conducted to determine the causes and cures of these disorders from the psychological and physiological points of view. Two of the major premises developed are (1) the psychodynamic concept and (2) the orthomolecular approach. The psychodynamic concept is criticized as lacking in scientific proof.

Kahan (1973) stated that the psychodynamic or "tension" oriented approach is based upon the premise that childhood occurrences, or traumas, can bring about mental disorders in later life, including schizophrenia. Furthermore, tension, strain, and unresolved problems can result in pathological disorders. Included in the psychodynamic theory is the lack of communication, family-society pressures, and alienation as the cause of mental illness. Kahan continued to point out that although these theories do not have a single case for proof, yet they are used as the basis for diagnosis and treatment by therapists throughout the western world.

According to many researchers, not only is there a lack of evidence to support the psychodynamic theory, but in reality it is a handicap in the field of psychiatry. Bindra (1959) stated that the available research suggests that the psychodynamic approach has turned out to be a "wrong lead." Cott (1970) strongly denounced the exclusive use of drugs or the psychodynamic approach to cure mental illness and other learning disabilities resulting from it.

Cott, who is a physician, advocated the orthomolecular treatment researched and founded by Abraham Hoffer and Humphry Osmond. He said,

> My associates and I have carried on research on the molecular basis of mental disease for 15 years. I am increasingly convinced that the provision of the optimum concentrations of substances normally present in the body, in addition to other therapeutic methods, is the best treatment presently available to schizophrenics. Because of their different genetic constitution, many schizophrenics may need an intake of vitamins not provided by a normal diet in order to achieve the optimum molecular environmental for their minds.

THE ORTHOMOLECULAR APPROACH

What, then, is the orthomolecular approach in the treatment of schizophrenia, childhood psychoses, and allied disorders? In recent years, some in the school of psychiatry believe that human thought patterns, emotions, and actions are affected by the physical condition of the body and that the nervous system cannot be expected to perform its many complicated functions without proper chemical balance (Ross, 1974).

Hilsheimer (1972) pointed out an interesting consideration in terms of biochemical imbalance and learning disability. He said,

> Only when the child has a normal internal environment can he learn, grow, and function; otherwise, the biochemical imbalance makes him unresponsive to practically all types of learning and leads him rapidly into worse behavioral problems. Full re-education is made incredibly difficult without correction of the biological dysfunction.

The orthomolecular approach involves the administration of megavitamins (massive doses of vitamin B_3 — niacin — and vitamin C), appropriate diet, exercise, psychotherapy, and other types of drugs. Initially a thorough study is done to determine the biochemical needs, and proper doses of megavitamins are prescribed. This treatment is also known as orthomolecular psychiatry.

In the early 1950's, Abraham Hoffer and Humphry Osmond brought the orthomolecular treatment from theory to practice by giving niacin to schizophrenics in the Province of Saskatchewan, Canada. Sensory distortions and hallucinations characteristic of schizophrenia may be the result of a chemical known as adrenochrome. This is a naturally occurring chemical that is formed during the oxidation of adrenalin. Interestingly, during World War II, adrenalin was used in anesthesia. Adrenochrome, found in old, discolored supplies of adrenalin, proved to cause hallucinations. Hoffer and Osmond took this chemical themselves and reported to have experienced distortions in thoughts, emotions, and perceptions similar to schizophrenic patients. They also theorized that large amounts of niacin could reduce the formation of adrenalin and adrenochrome. What appeared most striking was the face that the first eight schizophrenic patients recovered completely through the orthomolecular treatment. These early results were reported as astounding. A follow-up study revealed that all eight patients remained well at the end of 15 years.

Two formal experiments were conducted by Hoffer and Osmond with more patients. They used electroconvulsive therapy and various other treatments available at that time, in addition to the niacin therapy. Interestingly enough, in both experiments, patients receiving niacin improved significantly with fewer relapses than patients who received other forms of treatment with no niacin (Ross, 1974).

Since the early 1950's, the orthomolecular treatment has been researched by others and used by many professionals. Cott (1969) maintained that in order for the mind to

function properly, the brain requires molecules of many different substances. Mental illness, which is closely associated with physical disease, is the result of low concentrations in the brain of the following vitamins: Thiamine (B_1), Nicotinic Acid or Nicotinamide (B_3), Pyridoxine (B_6), Biotin (B_{12}), Ascorbic Acid and Folic Acid. Furthermore, there is sufficient evidence to believe that human behaviour and general mental functions are affected by changes in the concentration in the brain of uric acid, gamma-aminobutyric acid, and glutamic acid.

In the past, professionals as well as laymen received training which led them to believe that the everyday diet contains all the minerals and vitamins required for normal body functions. Granted, many people may not require supplementary doses of vitamins. However, ample evidence points to the fact that all people require supplemental doses of vitamin C. Cott (1969) stated, "A substantial body of scientific evidence has developed in recent years showing that mentally ill adults and children do, in fact, tend to have markedly atypical metabolism with regard to essential nutrilites (vitamins, essential amino-acids and essential fatty acids)."

During 1969-1970, Dr. Cott treated 250 children who were ill either with schizophrenia, autism, brain damage, or retardation. Many children were treated for learning disabilities. The vitamin treatment resulted in significant changes and, in most cases, this result was observed within two and a half month's time. It was Dr. Cott's experience to observe a definite pattern of improvement in children who were already responding to the treatment. Initially the child began to understand and obey commands, followed by cooperation with parents and other adults. Hyperactivity, which happens to be one of the major symptoms of childhood psychosis, subsided slowly. Those children who were non-verbal began to make vocal efforts. Children who were already verbal began to put forth effort to communicate through speech, using short phrases and sentences to express their wants and needs. In their general behavior, these children showed greater appreciation for people about them. The progress appeared to be directly proportional to the length of treatment. Younger children between the ages of three and eight responded better than did older persons (Cott, 1969).

Currently, research investigation is continuing in the importance of diet in the creation of an optimum molecular environment for the brain. Dr. Vitale and Velez reported on the village of Heliconia, Colombia, population 5,000 where babies are born with normal intelligence, but by the time they become teenagers, a shocking 95% are mentally retarded. This condition is mainly due to improper diet. The doctors pointed out that essential amino-acids play a vital role in physical growth. The people of Heliconia used manioc, potatoes, and rice for a staple diet — all of which are foods high in carbohydrates. In addition, they ate panela, a syrup made from sugar cane. These people were not only intellectually stunted but were physically stunted as well. Their average height was five feet three inches. Twenty-four percent of the total population were dwarfs who grew no larger than the normal six-year-old (Cott, 1969).

Proper nutrition and its affect on human behavior is of concern to many professionals, perhaps more so in the field of psychiatry since the advent of orthomolecular treatment. Many psychiatric hospitals routinely check the patients' diets as a part of their psychiatric treatment. Hilsheimer (1972) stated:

> The first thing we do with a child is to see if certain foods, especially those containing refined carbohydrates, are contributing to the problem. At that time they are also placed on large doses of vitamins, for practically every disturbed child is found to suffer a dietary deficiency, or food intolerance of some type. Megavitamins are administered in conjunction with a closely controlled diet containing few processed carbohydrates in order to restore body chemistry to normal and keep it there.

Practically all children sent to Dr. Hilsheimer were diagnosed as suffering from a deficiency of B vitamins. He pointed out, "Whole grains, undebilitated brown rice, eggs, milk and meat from properly fed animals are rapidly disappearing from the market." The result has been inadequate nutrition for the nervous system. Whenever hyperactivity and other behavior problems are observed in children, immediately these doctors inspect the child's diet for a lack of B vitamins and the child's metabolic ability to process the foods. Consider this, "A high intake of sweetened foods will cause a deficiency in the supply of the B-complex available to the body and the brain. The sugar habits of the child must also be assessed in the light of the B vitamin intake" (Hilsheimer, 1972).

Vitamin C deficiency is almost universal in children with special problems. For optimal functioning, human beings require a proper balance of foods from natural sources and as close to their natural state as possible.

Four main processes are summarized regarding nutrition:

1. Intake of correct foods in balanced and adequate amounts. Consideration must be given to age, sex, weight, and state of health. During infancy, childhood, pregnancy, and lactation, a relatively larger amount of food is required for growth.

2. Digestion or breaking down of complex chemicals into simpler forms.

3. Assimilation or absorption from the gastro-intestinal tract.

4. Utilization or conversion by various biochemical processes to replace the constant breakdown of living tissue (Kowalson, 1970).

Dr. Kowalson further suggested that malnutrition may result from a deficiency in one or more of these processes. It may also result from a failure to compensate for increased requirements of various essential elements.

He said, "In this land of plenty, poverty and/or ignorance are probably the most prevalent causes of poor dietary intake" (Kowalson, 1970).

Carbohydrate overload may cause anorexia or lack of appetite for essential foods. It may be due to some other disturbances such as depression, lack of exercise, tension, or illness. Anorexia nervosa is an extreme form of this condition characterized by a pathological aversion to food, which may result in weight loss and multiple deficiencies, including those affecting the brain function. This sets up a vicious circle which becomes hard to correct and many such persons are classified as psychotic.

Another disease known as Pernicious Anemia, which used to be fatal, now can be treated. Besides other effects, Pernicious Anemia can cause nerve damage and psychoses. This disease is caused by a lack of hydrochloric acid and the so-called intrinsic factor on the stomach lining, resulting in the inability of the body to assimilate B_{12}. This anti-Pernicious Anemia vitamin is found in rice polishings, meat, yeast, liver, eggs, and milk (Kowalson, 1970).

It was Dr. Kowalson who gave the old disease, schizophrenia, a new name called Sub Clinical Pellagra. This new name is more acceptable to parents than mental illness or schizophrenia. Green (1970) maintains that the main diagnostic criterion for the condition is its response to the administration of large doses of vitamin B_3 or niacin. He said,

> Sub Clinical Pellagra is a deficiency syndrome characterized by the presence of perceptual changes, affecting any or all of the five senses, associated with neurasthenia. It is due to deficiency of, or an increased demand for Niacin, the administration of which causes prompt disappearance of the symptom complex (Green, 1970).

The basic purpose of the megavitamin (or orthomolecular) treatment is to provide the body cells with the best possible environment. Kahan (1970) mentioned that there is evidence that schizophrenia is a vitamin dependency disease. A high dose of vitamins along with other chemotherapy, diet, and some useful treatment can be used to fight the disease.

Many published studies are available to show that this megavitamin therapy is beneficial in the treatment of schizophrenia. In 1973, over 50,000 patients were treated by hundreds of physicians using the orthomolecular treatment. These physicians reported 80% recovery rate in adults and a higher rate of recovery in children. As far as side effects are concerned, their reports include a small number. These side effects can be easily corrected through changes in doses and the prescription of corrective medication.

A few studies report negative results. It was found, upon examination, that these studies did not follow the methods used in the original treatment. Perhaps some of the researchers, nurtured on Freudian and psychodynamic theories, could not conceive a medical approach and were unable to follow the orthomolecular methods, reports Kahan (1970).

In addition to the treatment of schizophrenia, the orthomolecular approach was found to be useful in treating other disorders such as alcoholism, rheumatism, low blood sugar, arthritis, and behavior and learning disabilities in children. The orthomolecular treatment is also helpful in heart diseases, arteriosclerosis, reducing high blood cholesterol, and alleviating aging problems.

ADVANTAGES OF THE ORTHOMOLECULAR APPROACH

Kahan (1970) points out advantages to the orthomolecular approach.

(1) Infinitely better treatment results.

(2) Treatment is much less expensive and time-consuming.

(3) Considered as a medical problem with a good prognosis in most cases, much of the stigma and fear associated with the disease is removed.

(4) Because no one is blamed, there are less guilt feelings and less alienation of families.

(5) Diagnosis is more objective, more accurate, and more easily obtained.

It is interesting to note, however, that the orthomolecular treatment is not accepted by the medical associations. Could it be that it is uninvolved and too inexpensive? Perhaps it is not sophisticated enough for such diseases as malvaria, senility, neurosis, hypoglycemia, and other related diseases.

CONCLUSION

Dr. Hoffer is thoroughly convinced that the next decade will prove him to be a prophet. He decided some 22 years ago that the mentally ill people of the world could not wait for decades of research and studies when there was, in his professional and scientific opinion, something that could help them. As early as 1952, he acknowledged that megadoses of vitamin B_3 and vitamin C would help alleviate this problem of mental illness in its various forms and stages. Hoffer (1972) stated that the resistance to the orthomolecular approach is fading away; within ten years he feels that this approach will become the standard treatment for mental illness. Within this period there will be enough definitive studies so that it will be impossible to ignore this procedure in the treatment of mental illness. Otherwise one will risk being sued for malpractice.

According to Ross (1974), the orthomolecular approach has become a full-fledged

branch in the field of psychiatry. The professional organization for this branch of psychiatry is known as the Academy of Orthomolecular Psychiatry, which is now approximately five years old and has attracted over 200 professional members. The advocates of this approach have treated over 20,000 patients.

Time will tell whether or not the orthomolecular approach will survive the attacks of its critics.

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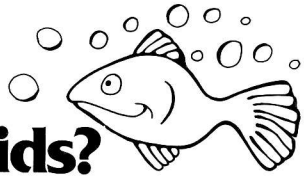

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SUMMER SESSION 1977
COURSE OFFERINGS

University	Course No.	Course Description	Credit hrs.	Dates	Instructor(s)
B.C.	Education 409	Methods of Teaching Home Economics	3 units	Jul. 1-Aug. 15	–
Alberta	See page 24, April 1977 C.H.E. Journal				
Sask.	HE HD 105A	Design Fundamentals Intro to principles & theories of design	*Lecture/2 hrs. Lab 2 hrs.	Jul. 5 - 23	D.E. Hassell
	HE HM 231A	Management and Decision making	Lecture/2 hrs. Group disc. 2 hrs.	Jul. 5 - 23	M. Crowle
	HE CT 103B	Introductory Textiles	Lecture/2 hrs. Lab 2 hrs.	Jul. 25-Aug. 17	R.M. Widger
	HE NU 213B	Basic Nutrition	Lect. 2 hrs.	Jul. 25-Aug. 17	J. Olson
	*Do not work on credit hours basis				
Manitoba	62.472 30.317 81.530		6 6 3	Jul. 5-Aug. 17 Jul. 5-Aug. 17 Aug. 1-Aug. 5	Mallin Dept. staff Nelson
Brescia	HE 0Z1	Food Facts & Fads	Full course (6 credits)	Jul. 4-Aug. 12	O. Moase
	HE 145b	Consumer Economics	Half course (3 credits)	Jul. 4-22	R. Polegato
	HE 157b	Interior Design	Half course (3 credits)	Jul. 23-Aug. 12	S. Stewart
Windsor	HM Ec 125 HM Ec 216C HM Ec 316C	Basic Foods Housing Interior Furnishings & Elements	1 credit ½ credit ½ credit	Jul. 4-Aug. 12 Jul. 4-22 Jul. 25-Aug. 12	Mrs. Scrutton Ms. Mogyorody Ms. Engel
	HM Ec 450C	Clothing & Human Behaviour	½ credit	Jul. 4-Aug. 12 (2 days/week)	Mrs. Lanz
	HM Ec 231C	Basic Human Nutrition (tentative)	½ credit	Jul.-4-Aug. 12 (2 days/week)	Mrs. Ho
Ryerson	FST 402	Family Studies: Family Dynamics	3	Jul. 4-22 (3 hrs/day)	Dr. P. Butler
	CST 302	Consumer Studies: The Consumer & the Marketplace	3	Jul. 25-Aug. 12 (3 hrs/day)	M. Law
	HDN 031	Housing & Design: Housing	6	Jul. 4-Aug. (3 hrs/day)	T.B.A.
Toronto (Fac. of Ed.)		Intermed. H.E. Certificate		Jul. 5-Aug. 13	H.E. Ed. Dept.
		Type A certification in H. Economics		Jul. 5-Aug. 13	H.E. Ed. Dept.
Ottawa	No courses offered this summer.				
Laval	No courses offered this summer.				
N.B. (Fac. of Ed.)	EDVO 5738	Textiles & Clothing: Purchase Decisions	3	Jul. 4-22	Ms. Susan Turnbull
	EDVO 5788	Applied Nutrition	3	Jul. 25-Aug. 13	Ms. E. Wein
St. Francis Xavier	H.Ec. C1.376	Consumer Aspects of Textiles & Clothing	3	Jul. 4-22	M. Murphy
	H.Ec. C1.315	Socio-Phychological Aspects of Clothing	3	Jul. 25-Aug. 12	C. Peters
Mount St. Vincent	M 601	Problems & Research: Food Family	½ credit	Jul. 4-Aug. 17	Dr. G. Ambruster
	M 610	Special Methods of Teaching FLT Education	½ credit	Jul. 4-Aug. 17	Dr. E. Murray
	M 404	Creative Pattern Making	½ credit	Jul. 4-Aug. 17	Dr. G. Conrad
P.E.I.	440S	Family Development	6	Jul. 4-Aug. 15	Dr. Lorette Toews

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HOME ECONOMICS REGISTRATIONS IN CANADIAN UNIVERSITIES 1976-77

University	Title of Home Economics Dept.	No. of Years Required for Degree	Undergraduates 1st yr	2nd yr	3rd yr	4th yr	Total	Graduate Degrees	Part Time Students	Other Information
British Columbia	School of Home Economics	B.H.E. 4	70	127	100	105	402	M.H.E. 8 Ph. D. 1		5th yr Education consists of: 10 B. Ed. 52 B.H.E.
		B.Ed. 5	11	20	22	19	72			
Alberta	Faculty of Home Economics	B.S.H.Ec. 4	79	92	87	91	349	M.Sc. 36	8	
		B.Ed. (Home Economics 4	36	50	41	33	160	M.Ed. 10		
Saskatchewan	College of Home Economics	B.S.H.Ec. 4	60	49	30	40	179	M.Sc. 2 M.Ed. 1 + 2 p.t. Ph.D. 1	10	
		B.Ed. (Home Economics)	24	11	9	3	47			
Manitoba	Faculty of Home Economics	B.H.E. 4	115	86	84	102	387	M.Sc. 5 occasional		12 Special Students
	Certif. Program in Faculty of Education	1 yr beyond B.H.E.					26	26 f.t. 14 p.t. M. Ed. 3		
	Pre-Master's	1 yr beyond B.H.E.	5 full time 3 part time				8			
Western Ontario Brescia College	Dept. of Home Economics	B.Sc.H.Ec. 3	66	63	41	21	191			Students must register at U.W.O.
Windsor	Faculty of Social Science	B.A. 3	77	91	94		262			
		Hons. B.A. 4				9				
Toronto	Faculty of Education	B.Ed.						81		B.Ed. after B.A., B.H.Sc., M.Sc. etc. New program at U. of T. "Community Living" — Replaces Faculty of Food Sciences.
Ryerson Poly-Technical Institute	Dept. of Home Economics	B.A.A. 4	115	112	94	94	415	N/A	30	
Guelph	College of Family and Consumer Studies	B.A.Sc. 4	261	236	263	221	981	M.Sc. 37 Ph.D. 2		
Ottawa	Dept. of Dietetics	B.Sc.H.Ec. 4	**	5	6	2	13		2nd yr 10 3rd yr 8 4th yr 9	** programs being phased out. New program — B.Sc. nutrition and dietetics starting at the Faculty of Science & Engineering (Dept. of Biochemistry) For information contact: Dr. Nicole Bégin-Heick, Dept. of Biochemistry, Faculty of Sciences & Engineering, Vachon Hall, 40 Somerset St. E., Ottawa, Ont.
		B.A. conc. H.E.	**	2	8		10			
		B.Sc. S. (diététique) 5	**	13	39	30	82			
		B.Sc.D.	**	Included in B.Sc.H.Ec.						
Macdonald Campus McGill University	School of Food Science	B.Sc. (F.Sc.) 3 + 2 yrs CEGEP	36	41	37		114	M.Sc. 1		
		B.Ed. (Home Economics) 3 + 2 yrs CEGEP	12	7	5		24			
Montréal	Département de nutrition Faculté de médicine	B.Sc. (nutrition 3	45	44	46		135	M.Sc. (Nut.) 10 M.Nut. 12		
		B.Sc. (sujet majeur: alimentation) (sujet minor: éducation)	3	0	0	0	3			
Laval	Département de Diététique	B.Ed. (H.E.) 3	3	11	2		16	M.Sc.7	B.Ed. 11	
		B.Sc.S. diététiques 3	41	32	51		124			
		B.Sc.A. (consummation) 3	9	15	10		34			
Moncton	Ecole des Sciences Domestiques	B.Sc.D. 4	22	27	26	29	104	M.Sc.D. 7		
New Brunswick	Home Economics Section, Faculty of Ed.	B.Ed. (Home Economics) 4	16	13	16	10	55		2	3 students in B.Ed. (one year after another Bachelor's) 1 student in B. of Teaching
Acadia	School of Home Economics	B.Sc.S. Home Ec. (see other info)	36	27	12	41	116			4 yrs. required from N.S. Grade XI or equivalent 3 yrs. from N.S. Grade XII.
Mount St. Vincent	Dept. of Home Economics	B.Sc.H.Ec. 4	total 44		18	15	77	M.Ed. approx. 20 part time	20	
		B.H.E. 3 or 4	total 84		14	21	119			
St. Francis Xavier	Dept. of Home Economics	B.Sc.H.Ec. 4	27	18	20	18	83		2	
Prince Edward Island	Dept. of Home Economics	B.Sc.H. Ec. 4	37	12	18	13	80		3	

*NOTE: The students in the undergraduate and graduate programs at the University of Guelph are enrolled in five major areas of study: Family Studies, Consumer Studies, Applied Human Nutrition, Child Studies and Textiles. Not all of these students will identify after graduation with Home Economics and the Canadian Home Economics Association. Some will choose to identify with organizations and fields of interest more specifically related to their major area of study and their career choice.

Perspectives on Home Economics and Family Programs[1] in Canada

by Janet M. Wardlaw,
Dean, College of Family and Consumer Studies,
University of Guelph

The Planning for Better Family Living Workshop Committee when asking me to tell you something about the College of Family and Consumer Studies and its relatively recent developments, asked me as well to give you a perspective on Home Economics programs in Canada. It was fitting that they should make this request not only because you are interested in Home Economics programs, but because such a perspective will be helpful to you in understanding our history and the development of our current interests in Family and Consumer Studies.

The development of the College of Family and Consumer Studies followed the formation of the University of Guelph. The University of Guelph was formed in 1964 to bring together the three founding colleges — the Ontario Agricultural College, the

[1]Presented at the "Planning for Better Family Living Workshop" held at the University of Guelph, July, 1976, as a pre-Congress workshop prior to the International Federation of Home Economics Congress held in Ottawa. Representatives attended from 20 countries, the majority of which were third world countries.

Ontario Veterinary College and Macdonald Institute of Household Science, in association with programs to be developed at the undergraduate and graduate level in the arts and humanities, and in the social, physical and biological sciences. To continue the "old" programs of the founding colleges in isolation and without the support of the disciplines found within the usual university setting would, in the long run, have led to professional education programs which could not rank with those based in universities. The far-sighted president who envisaged the formation of the university and saw it as a necessity if valuable programs were to survive, realized the potential for the development of a college which might grow out of the traditional Home Economics program at Macdonald Institute. In his view a major study of the program was essential if indeed the university was to provide a viable program which in a changing society would contribute to the well-being of families and to an understanding of the market place as it relates to individuals and families as consumers. Thus in 1969 after a year of study, the College of Family and Consumer Studies came into being with totally new academic programs at both the undergraduate and graduate level and a new organizational structure designed to serve the needs of the new programs.

I think it is appropriate to tell you something of the historical development of Home Economics programs at the university level in Canada, and of the situation in Canada today before desribing in more detail the College of Family and Consumer Studies. This background will be important in terms of your special interests in Home Economics and important too in telling you more about the College of Family and Consumer Studies at the University of Guelph.

The earliest university programs in Home Economics in Canada were developed through the support of two major industrialists. Macdonald Institute was founded at Guelph in 1903 through the generosity of Sir William Macdonald, the founder of the Macdonald Tobacco Company, a company which still exists today. Although this program was developed initially as a diploma program, its history is so interwoven with the development of the university programs that I feel it is appropriate to include it here. At the turn of the century, Mrs. Adelaide Hoodless, who was the founder of the movement known in Canada as the Women's Institutes, but world-wide as the Associated Country Women of the World, was actively involved in promoting the training of "domestic science" teachers. She had lost her infant son because he had been fed contaminated milk and this event led her to become aware of the need for such teachers in the schools of Ontario. She went to Sir William Macdonald and told him of this need and as a result, he gave funds to establish the Macdonald Institute of Household Science. The first graduates of this program went out as teachers into the Ontario school system. Sir William Macdonald also founded Macdonald College at McGill University and there his funding provided for the development of both an agricultural college and a school of household science. The Massey family of the Massey-Harris (now Massey-Ferguson) Company, a firm known world-wide as manufacturers of farm machinery, were also involved in the development of two university programs. Lillian Massey became interested in the need for household science education at a university level because of her interest in domestic science programs for Toronto children and worked through the University of Toronto to establish a home economics program in 1902. The University of Toronto was the first Canadian university to grant graduate degrees in Home Economics. Lillian Massey gave her name as well to a school of household science at Mount Allison University in New Brunswick. Unfortunately in the last several years, decisions have been made to phase out the two faculties established through the interests of Lillian Massey.

Across Canada there are about sixteen university programs in Home Economics. It is difficult to be precise about numbers because there are several programs which focus only on dietetics and nutrition, but which have always had an association with the home

economics programs across the country. Although our program in Family and Consumer Studies at the University of Guelph shares some common goals, we do not define it as a program in Home Economics.

The university Home Economics programs in Canada developed to some extent with United States programs as models, but held on longer to the strong nutrition base of the initial Home Economics programs than did those in the United States. Perhaps this was a reflection as it was in the earlier days in the United States of the backgrounds of the deans and directors and of the faculty members with advanced graduate training. Until very recently all the deans and directors in Canada were nutritionists. However, this pattern has been broken and there are now several directors of university programs who come from fields other than nutrition. Also in Canada we held on for many years to a general Home Economics degree, although calling it general can be misleading because in almost all instances, it was a degree strongly oriented toward foods and nutrition. This background may explain why in Canada the development within Home Economics of areas of study such as child development, family relations and family economics, is relatively recent.

The careers which were followed by graduates of these programs were primarily in teaching with dietetics probably being the next most frequent career choice. In a study which we did at Guelph in 1968 in relation to the development of our relatively new program in Family and Consumer Studies, we found that of the graduates in Household Science at Guelph between the years 1962 and 1966, thirty-six percent were in secondary school teaching, ten percent were in nutrition and dietetics, four percent were in extension, and four percent were in business and other fields. At that time twenty-seven percent were not in the labor force and twenty percent were in fields other than home economics. Now, ten years later this pattern will have changed. Variations from this will depend on the developments within the individual programs and the degree of focus on some of the more social-science oriented areas of study.

We are fortunate that in Canada the deans and directors of the schools of Home Economics and programs sharing some of the same interests are able to meet relatively easily on an annual basis. We can sit around one large board room table, we can have some rather strenuous debates, we can become emotional at times, but we know one another. Perhaps because geographically we are so far apart and therefore do not see too much of one another from one meeting to the next, we have time between meetings to put in perspective the various developments across the country. I first became associated with this group in 1969 and I find it interesting to look at some of the trends in our discussions since then. At that time there was a great deal of concern about the need to have a "sameness" in the university programs across Canada and with the need to develop a common definition of a Home Economics program and of a home economist. By 1971 when the group met at the University of Guelph there was an eagerness on the part of the directors to describe some of the different thrusts developing in each of their institutions, but as well a continuing concern about the need for a firm definition of a home economist so that, to quote those advocating such a definition, employers might know "what they are getting" when they employ a home economist. This concern was also evident at the 1975 meetings. The report written after the 1975 meeting of Deans and Directors indicated a strong interest on the part of some of the institutions for accreditation in Home Economics such as we see under the auspices of the American Home Economics Association. This point of view is partially balanced by the point of view of at least one institution, the University of Guelph. We have not developed a program which can be said to relate to one professional area such as Home Economics, or one occupational classification, but to a wide range of career opportunities which have in common a focus on the needs of families and consumers. Thus as a faculty, we do not

share the concern of some of our colleagues for commonly adhered to curriculum guides and a definition of a professional group with which all our graduates can identify.

And now, I would like to focus on the program in Family and Consumer Studies at the University of Guelph. I think that I can justify describing our development since 1968 not only to tell you of the setting in which this workshop is held, but as well to tell a story of change in days when change is something that all of us must be aware of and must be prepared to accept. I often wonder if we will reach a state where we are continually responding to new and changing needs, or whether we will continue with situations which lead to a rather major change which, while it can be exciting and rewarding, can also be difficult and at times traumatic.

In 1968, as the Macdonald Institute of Household Science, we were the largest Home Economics program in the country. This was just after the University of Guelph had been established through the bringing together of the Ontario Veterinary College, the Ontario Agricultural College and Macdonald Institute as the founding colleges of the university. The first president of the University of Guelph recognized the importance of the program in Macdonald Institute and its potential for the future. He recognized the need to review the goals and direction of the college and for this reason made a real commitment to the study of the program at Macdonald Institute and to the encouragement of its development as a very viable part of the new university. As a result, an associate dean-dean designate was appointed in 1968, a year prior to the dean's retirement, to work with faculty, students and alumni to determine the appropriate direction of the program. This action was important not only because it made it possible, in terms of time commitment, for a major study to take place, but because it made it obvious to all concerned that there was a sincere commitment to the necessary study and review required and that significant support was being given by the senior administration. This kind of obvious commitment is recognized as essential in bringing about major change in an established organization. As a result, we were able to study in a positive way, the program as it existed and to look toward needs in society as they would exist, to quote the President, "in the 1980's".

To carry out the study, a small faculty committee was formed which acted as a drafting committee. The committee maintained close liaison with the faculty through what came to be known as "lunch bag" sessions which were held almost every two weeks throughout the winter and spring of 1968. We had the cooperation of the Vice President, Academic, who would respond at any time to request to meet with faculty as a group, or to join a panel of outsiders coming in to meet with us. We had excellent response to our requests for assistance from our graduates, from employers of our graduates and from others whom we saw as potential employers, and from in-course students.

As a result of our studies, we developed the Bachelor of Applied Science program in Family and Consumer Studies. This development involved major changes in the curriculum. We moved from a very structured program with a large common core of courses and with three options available in the final year to a program with much less structure, with virtually no common core across the five majors, and with the major area of study to be selected by the end of the first year. The program incorporated new areas of study which were developed not because we could define specific jobs, but because we could see needs within society, needs arising for example in our society because of the greater mobility of families, the greater involvement of women in the labor force, the greater dependence of families on cash purchases rather than on home production, the increasing awareness of consumer needs and satisfactions, and related to this, the need to define the role of the consumer, of business and of government. To meet these needs we moved to a program with five major areas of study — Family Studies, Con-

sumer Studies, Applied Human Nutrition, Child Studies and Textiles[1]. The curriculum change made it obvious that the three departments, traditional departments of Foods and Nutrition, Home Management, and Textiles, Clothing and Design, were no longer appropriate. As the curriculum had developed it seemed to cluster around two areas — Family Studies with a focus on the family as a system, and Consumer Studies with a focus on the interrelationships among the consumer, government and industry. Thus we moved to an organizational structure which included only two departments, the Department of Family Studies and the Department of Consumer Studies.

Both the new program in Family and Consumer Studies with its five majors and the new college organization were initiated in the fall of 1969. Our first class graduated in 1972 and five years later we are beginning to see career patterns developing. Graduates are going not only into defined professional roles such as teaching and dietetics, but as well into less clearly defined areas in business, government and family service agencies which do not have a specific professional structure and recruit from a variety of educational programs. A significant number use their undergraduate degrees as a base for entry into schools of law, medicine, social work and business administration.

Concurrent with the development of the Departments of Family Studies and Consumer Studies, a School of Hotel and Food Administration was established at the University of Guelph. With the reorganization of the administrative structure of the university and of this college, the School became a part of the College of Family and Consumer Studies. The School of Hotel and Food Administration which is very much an integral part of the college, is responsible for a four-year program in Hotel and Food Administration which has an enrolment of about 300. It is the only program of its kind in Canada and can probably boast of the greatest number of job offers per graduate of any program on campus. With this enrolment and approximately 1000 undergraduates in the program on campus. With this enrolment and approximately 1000 undergraduates in the program in Family and Consumer Studies, we have a total undergraduate enrolment in the college of about 1300 students.

All these developments led to interesting developments in terms of the faculty. We became very definitely a multi-disciplinary group. The faculty in the Department of Family Studies have backgrounds in nutrition, psychology, sociology, child development, family economics, home management, and social work, and we see possibilities of this list lengthening. In the Department of Consumer Studies, we have individuals with backgrounds in the product areas such as foods, textiles, clothing and housing, and thus have as faculty members, architects, planners, designers, food scientists and textile scientists. As well, we have a group of faculty who could best be described as coming from schools of business with backgrounds relating to consumer behaviour and marketing. The School of Hotel and Food Administration has its own unique mix. Communication within this kind of multi-disciplinary group does not just suddenly begin to happen. We learned that it takes time and development of confidence on the part of individuals and small groups of individuals before good communication and ultimately cooperation take place between, for example, food scientists and faculty members with backgrounds in consumer behaviour, or between nutritionists and psychologists.

A grouping such as ours in the College of Family and Consumer Studies may differ in terms of initial communication problems from a traditional Home Economics group such as many of us have known. In such settings, most of the faculty have either a

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[1]Commencing with the 1977-78 academic year, the major in Textiles will be no longer offered. Students interested in textiles may enroll in Consumer Studies and select an emphasis in Textiles and Clothing or elect a minor in Textile Science in the B.Sc. program.

Home Economics undergraduate degree or a graduate degree from a Home Economics program and thus have a greater base for understanding. In our situation, sociograms over time of the coffee and tea hours in the lounge would, I feel sure, have told something of the development of communications and interrelationships among our faculty group. In addition, in retrospect, we realize that the planning of conferences for outside groups which because of their nature had a multi-disciplinary make-up, was a valuable activity in building working relationships among faculty with various backgrounds. These relationships are now extending into the formal teaching situation and into research and graduate student supervision. We feel that because of these developments, we are able to look at needs – in terms of undergraduate and graduate education, research, and programs for professional groups – in unique and valuable ways.

And now perhaps I can come back to my initial comments regarding the University of Guelph's position in relation to colleges of Home Economics in Canada. We see ourselves as a college supportive of the interests of colleges of Home Economics, but not as a college of Home Economics. Some of our students will, after graduation, have a primary affiliation with Home Economics and may define themselves as home economists in relation to their professional responsibilities. But many of our graduates will not consider themselves to be home economists and they will not consider themselves to be graduates of a college of home economics. Only a small group within the faculty will consider home economics to be their primary professional affiliation, but as understanding has developed, more and more within the faculty group feel supportive of the area and can relate to it within the perspective of the college. This support and understanding will be very evident as you look at the involvement of our faculty in this program, a workshop relating to the International Federation of Home Economics Congress. The majority of those from the college listed in your program have no Home Economics background, but are interested in and supportive of this workshop program.

In conclusion, I think it is realistic to suggest that there are many different models for the education of students interested in careers relating to family needs. The model that is appropriate to mid-west Canada, for example, may differ very much from the model that we are developing here at the University of Guelph. Even closer to home, the technologically-oriented degree program in Home Economics which is developing at the Ryerson Polytechnical Institute in Toronto differs very much from the program at Guelph but complements it by meeting some professional needs in a different way. And so, I hope that in talking of the College of Family and Consumer Studies at the University of Guelph I have not only told you a little about us, but have illustrated the diversity and the appropriateness of this diversity within one country or one province in programs relating to the well-being of families.

If we can maintain an awareness of changing needs and an acceptance of change in educational programs, whether we ourselves are involved in these programs or are as employers the "consumer of the products", I think all of us can be optimistic about our potential to contribute to important developments in our own countries.

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WHAT'S NEW

by Carol Ferguson

FOOD FIBRE INFORMATION

With the nutrition spotlight on fibre and its significance in the diet, you will be pleased to find all the basic information conveniently packaged in a big *Food Fibre Information Kit from Kellogg's.* Contains an extensive collection of pamphlets related particularly to cereal bran as a source of fibre. Brochures in the kit available in quantity, free of charge, from Kellogg Salada Canada Ltd., 165 University Avenue, 5th Floor, Toronto M5H 3B8.

From Lawry's Foods of Canada Ltd., a brand new type of Onion Salt called *"Garden Green Onion Salt"*. This newest member of Lawry's shake-on family contains small pieces of green onion tops, creating visual appeal when used as garnish as well as onion flavour when used as ingredient in a recipe.

Lawry's have also announced a new extension to their Gravy Mixes: *Onion Gravy Mix,* prepared without tears. Served as accompaniment to potatoes, meats and vegetables, or serves as a base for casseroles and soups. Marg Howard's recipes include a metric version for "Cheddar Onion Quiche".

. . . And the Bouclair Pattern Company has recently opened a boutique featuring "stretch patterns". It is at 1911 Dundas Street West, Mississauga, Ont.

What's a *GRAB-IT?* A bowl for your imagination! This small round all-purpose CORNING WARE dish with a mini self handle makes its debut this spring. Multi-functional: small mixing bowl, scramble eggs, soften cheese, melt butter, reheat leftovers, individual casserole, soups, souffles, snacks, sauces, jelly mould. A bowl to mix in, cook in (oven, range, microwave), serve in, store in. All white; two 15 oz. bowls to a set; about $9.99.

CORNING'S COFFEE CENTRE: Corning introduces two new *Filter-drip coffee makers,* one *Corning Ware* and one *Pyrex.* Both come with a plastic cone, filter papers and lid. Both coffee makers are placed over direct heat to keep the brew at serving temperature; the Pyrex model uses a wire grid for electric elements. Easy to clean, will serve for other beverages. Pyrex maker about $12.95; Corning Ware in cornflower pattern $19.95, Spice o' Life pattern $21.95. Welcome additions to popular filter-drop coffee making, both make up to 6 cups of good coffee.

If you are in the market for a new set of good knives for home, work or school, *CUTCO CUTLERY* is worth a look. Just recently made available in Canada, CUTCO is a product of Wear-Ever Aluminum U.S.A. The most impressive feature of the carving and slicing knives is their incredible sharpness; thin, even slicing of meats or breads is a breeze; the best part

is that you never have to sharpen them (a touch-up re-sharpening service is available if ever needed). Unique cutting edge has long-lasting Double D Grind; contoured design of handles developed after extensive research; three-rivet, full-tang construction; blades combine stainless steel with carbon steel. Besides a good range of knives, CUTCO has terrific kitchen shears, tools, forks, storage trays, sharpener for knives without the Double D Grind. Prices are reasonable; good replacement and service policy. Not available in retail stores. Contact Keith McIntosh, Patton Household Specialties Ltd., 228 Norseman St., Toronto M8Z 2R4; phone 236-2334.

OUTDOOR FUN FABRICS: For home sewing, three nylon fabrics suitable for camping and hiking gear; squall jackets, outer shells, windbreakers, ponchoes, rainwear; from Rose E. Dee. RIPSTOP, tattersall check effect in the weave, $3.79 yd. Also 200 denier OXFORD CLOTH, $3.99 yd. Both Endura-coated (water-resistant backing). TETONCLOTH at $2.29 yd. is lightweight and has breathability, for linings, etc. All three fabrics are 100% nylon, about 44 inches wide, come in primary colours. At most better fabric shops.

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The range includes:

- 12 issues of a monthly microwave newsletter "What's Cooking" @ $12.75 each ($16.00 with binder)
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- Polysulfone Ring Mould — 7 cup capacity @ $7.95
- Microwave Thermometer @ $14.95 each

Add $1.00 for handling and shipping/of each **item** ordered. Ontario residents add 7% sales tax.

- "A" Kit — Rack/Mould/Thermometer @ $29.95
- "B" Kit — Rack/Mould @ $14.95

Add $2.00 for handling and shipping/of each **kit** ordered. Ontario residents add 7% sales tax.

The roasting rack and ring mould are made from polysulfone — the most suitable thermoplastic available for microwave utensils. Polysulfone is far superior to other plastics now being used. And with proper care, it will last a lifetime.

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Available in deep chocolate brown. Complete instructions for the use and care of your utensils are included.

Roasting Rack. Prevents meats from steaming in their own juices. Great for hors d'oeuvres bacon, sausages and all breaded foods. Fits standard ovenware utility dishes.

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HURRAH AND FINALLY! Canned chicken stock, for all those (American) recipes calling for 1 cup of same, and for those who've always wished for some for our recipe writing. Thank you, CAMPBELL'S for CONDENSED CHICKEN BROTH (10 oz.).

HAPPENINGS

NUTRITION – CANADA REPORT ON FOOD CONSUMPTION PATTERNS – HEALTH AND WELFARE CANADA

OTTAWA – Health and Welfare Minister Marc Lalonde has made public a national report on food consumption patterns in Canada, which completes another stage in the analysis of data collected during the Nutrition Canada survey.

The *Nutrition Canada Food Consumption Patterns Report* examines the consumption of selected food groups and their contribution to the nutrition of seven age groups, pregnant women, Indians and Eskimos. It also considers regional and seasonal differences. While on average Canadians are consuming a good variety of foods as advocated by Canada's Food Guide, several recommendations are made in respect to certain groups.

The main findings reported are:

– 40 per cent of the total caloric intake came from fat and 13-14 per cent from protein;

– 7 per cent of the total caloric intake came from high-sugar foods;

– intake of dairy products decreased with age and was insufficient to meet the calcium requirements for elderly men, adolescent and pregnant women;

– consumption of meat, poultry, fish and eggs increased with age, with a peak in the 20-39 year age group and a decline after 40 years of age;

– the mean intake of vitamin C was well above recommended levels;

– few infants were breast-fed and baby foods, mainly cereals, were fed to them at an early age with most receiving a wide variety of commercial baby foods before they were two months old;

– pregnant women reported food patterns similar to those of 20 – 39-year-old women, with only modest increases in milk and fruit consumption. Calcium intake was lower than recommended. Most reported the use of vitamin and mineral supplements;

– people in the Atlantic region consumed more margarine than butter, more evaporated milk, potatoes and less fruit than those in other regions;

– in Quebec there was a higher intake of high-sugar foods and soft drinks and a lower consumption of dairy products;

– potato consumption was lowest in the Pacific region;

– Indians consumed less milk, fruit and vegetables and more meat, fish, poultry and cereal products than the national population;

– Eskimos had a higher mean consumption of the meat groups, particularly fish and wild game, than the national and Indian populations, but their mean consumption of all other food groups, except high-sugar foods, beverages and soft drinks was lower.

The report recommends that:

1. adolescent and adult females and elderly males should increase their consumption of dairy products since their calcium intakes were below recommended levels;
2. the percentage of calories obtained from fat should be lowered. This could best be achieved by reducing the consumption of high fat meats since butter and margarine provided only 5-8 percent of total caloric intake;
3. those age groups with low thiamin and

iron intakes should increase their consumption of cereal products;

4. during pregnancy, greater emphasis should be placed on increased consumption of dairy products, fruit and vegetables in order to increase the intakes of calcium and folic acid. With a greater increase in the consumption of milk, the use of vitamin and mineral supplements except for iron and folic acid, would be unnecessary.

Note: A summary report is available to the public on request, from Educational Services, Health Protection Branch, 255 Argyle Street, Ottawa, Ontario, K1A 1B7.

Vending companies promote nutrition

Chairperson of the Canadian Automatic Merchandising Association's new Nutrition Committee, Carolyn Clark, believes the Committee's recommendations will have a significant impact on the vending industry.

"The Committee will draw together the nutrition viewpoint, the product supplier, and the all-important marketing link, the vending operator", says Ms. Clark, Executive Dietitian for VS Services Ltd.

She outlined the Committee's objectives as:

- providing factual information to members, media and the nutrition community with a view to relating nutrition information to the practical aspects of the food industry.
- working with suppliers to develop and promote new products which meet predetermined nutrition standards.
- educating members and customers in the principles of sound nutrition to encourage a change in Canadian eating and snacking habits.

Emphasizing the practical aspects that must be considered, such as shelf life, shape and selling cost, she described some recommendations that have already been proposed by the Nutrition Committee. One is a nutrition rating system on the "seal of approval" style for suppliers and operators providing nutritious products. Another is a resource kit of nutrition promotion ideas for members such as the "good eating habits" reminder cards shown at the meeting.

Some health snack products newly introduced to the vending industry were shown, together with other nutritious items which have been available for some time, and which conform to items recommended by the Ontario Ministry of Health in the Working Paper on School Food Service.

Finally, Ms. Clark stressed that the issue of vending in school food service was a community concern, and noted that the CAMA was open to constructive criticism and practical suggestions for improving the nutrition choices open to their customers.

GF Award

Mr. Robert S. Hurlbut, President of General Foods, Limited today announced the winners in the third annual General Foods nutrition Communication Award, from entries received from the media across the country.

The adjudicators gave the Award of Excellence to Mme Louise Lambert-Legacé of la revue Châtelaine; the Award of Merit was given to Miss Julian Armstrong, The Montreal Star and the Highly Commended notation was given to Mrs. Tina Ivaney of the Mississauga News, Ontario.

Louise Lambert-Legacé receives a cheque for $1,000., Julian Armstrong, $500., and all three winners receive specially designed commemorative plaques.

"General Foods decision to continue to hold this annual nutrition achievement award for the media recognizes the important role played by communicators in bringing sound, practical and readable nutrition knowledge to the general public."

The award is open to all Canadian writers and broadcasters for single columns, features or a series published or broadcast during the calendar year. There is no entry form as such. The mailing of article(s) constitutes an entry. The deadline for submission for the fourth annual award is February 15, 1978.

Advance Notice

The Faculty of Food Science and Household Science Alumanae of the University of Toronto announce the following Sesquicentennial Events.

Friday, November 4, 1977; 8.00 p.m. Medical Science Bldg. U of T.

The Professor Edna W. Park Lecture. Title: "Creal, A Protein Food."

Lecturer: Sally Henry, BA, Maple Leaf Mills Ltd. Member of Governing Council, University of Toronto Consultant, International Development Research Commission.

Saturday, November 5, 1977; 9:00 a.m.-4:30 p.m. "Nutrition Toronto – A Symposium".

Morning session – research papers on current nutrition concerns.

Afternoon session – panel discussion on – "Food Consumption Trends and Nutritional Health in Toronto with representations from the University, Government and Industry.

Registration forms will be distributed in August – for further information contact Miss Margaret McKellar, 9 Colwick Dr., Willowdale, Ont. M2K 2G2.

Registration fee for Saturday session – $5.00.

DEPARTMENT DISBANDED

The Consumers' Gas System has decided to disband its entire Home Service Department effective September 30, 1977. The department has been in existence for 52 years and has built up a reputation for its many innovative programs and services to the community over that time. We're sorry to see it go!

LETTER TO THE EDITOR

Yesterday I received my copy of the January issue of the *Canadian Home Economics Journal,* and, as usual, I am finding it very interesting and informative.

I want to thank you, particularly, for the kind words about the Anniversary Issue of our *Newsletter,* and for the congratulations which you extended to me as editor. I must confess I was utterly surprised to actually see my name in print, and quite humbled to have it appear in our own national Journal. I thank you for this very kind honour.

Congratulations to yourself, not only for the very splendid Journal which you edit, but also for the new cover which was introduced with this past issue.

With every good wish for continued success.

Sincerely,
Clara E. Jefferson

Editor's Note – We'd like to hear from more of you!

A MOBILE GROUP

For your information, there have been approximately 460 changes of address recorded since July 1976 issue. These figures apply only to members and not to new members added to lists.

APPOINTMENT

Saskatchewan Home Economics Association (S.H.E.A.) has announced the appointment of their Executive Secretary – Mrs. Marilyn Nelson.

Consumers Association of Canada

The March issue of the CAC magazine is devoted to Housing for Canadians. The articles include: Should You Rent or Buy? ; The New Home Warranty Plan and What it Means to You; What Happens to Children in High Rises? ; Public Housing. etc.

ALICE HAMILL PYKE

Alice Hamill Pyke passed away in November 1976 after a long illness. Mrs. Pyke was a graduate of the University of Tor-

onto in 1917. She had a teaching career in Ontario and Saskatchewan. In 1924, she became on inspector in Home Economics in the Department of Education in Ontario. In 1945, she was married to Prof. A. J. Pyke of the University of Saskatchewan. After his death, she returned to Ontario and in 1951, was appointed to the position of Dean at the Hamilton Teachers College. She retired in 1964.

IN MEMORY OF DR. JEAN TREMOLIERES

Professor Jean TREMOLIERES died on 30th July 1976 at the age of 62. He once said "Death leaves us only the glimpses of eternity we have caught in the departed". An intense presence is the inheritance which Jean TREMOLIERES has left us. His personality was so strong, rich and courageous that it could almost make us forget his nonetheless considerable scientific achievements.

As Professor of Biology at the Conservatoire National des Arts et Métiers in Paris, where he lectured on the biology of nutrition, his teaching was a model of excellence and his principal contributions to the field form the contents of a work in four volumes. Director of the first Unité de Recherches de l'Institut National d'Hygiène, which later became l'Institut National de la Santé et de la Recherche Médicale, his work resulted in over 550 publications, all dealing exclusively with human nutrition. His research focused mainly on nutrition surveys, protein metabolism, obesity, malnutrition, alcohol metabolism, digestive fistulas and metabolic toxicology.

From the outset of his research at the beginning of the Second World War, he devoted his career to the study of methods of measuring nutritional status and of the role of nutrition in public health, both in developed and in under-developed countries.

A forthright expert whose opinion was much heeded, he openly challenged the concept of fixed standards of nutrition. Shortly before his death, although aware of the gravity of his illness, he decided to organise a symposium on the meaning of standards of nutrition which was to have taken place in September 1976.

Very early in his career he realised that the nutritionist should not remain cooped up in his laboratory. His unfailing availability to others compelled him to involve himself wherever he felt that he might be of help to mankind.

Consequently, he undertook numerous duties on various national and international committees, where it was his constant endeavour to convince others that the science of nutrition should be both useful and humane. His increasing sense of responsibility led him to wage a campaign to educate the public in nutritional matters using the press, radio and television as well as publishing specialised books such as "Le Manuel d'Alimentation Humaine", or books for the general public such as "Diététique et Art de Vivre" and "Partager le Pain", which was his last "message" to use a word he was fond of. He was the founding father of human nutrition in France, he established the Cahiers de Nutrition and he was on the editorial boards of numerous French and foreign journals.

It was impossible to meet Jean TREMOLIERES without falling under his spell. His fine, ascetic face crowned by a mass of white hair was illuminated by extraordinarily intense eyes. His gaze, which could be serious, even hard when he was deeply involved, could also be marvellously welcoming and loving or show his pleasure in mutual understanding. He found his source of inner strength in his faith and in the unremitting support of Mme TREMOLIERES.

He gave his full attention to everyone he met; no-one could be indifferent to his man. Many know how much they owe him, but many more will remain unaware of what he has done for them.

Professeur G. Debry
Département de Nutrition
et des Maladies Métapolques
Université de Nancy

Provincial News

The Nova Scotia Home Economics Association celebrated its 50th Anniversary in 1976. This article is about the next fifty years from the point of view of a teacher of Home Economics.

THE NEXT FIFTY YEARS: Thoughts of a Home Economics Teacher Educator

As I think over the many changes on the horizon for the next fifty years, I would like to concentrate on three — three that should be of major concern to us because indeed the first waves of them are already in this land, and even now are causing disruption in our way of life. Problems of all the areas inevitably must grow and will become tremendous challenge to professional home economists, concerned as they are with improving the lives of families and of individuals.

1. A search for full humanity

The first, for want of a better description — the movement is quite diffuse as yet — I shall call a search for full humanity. It is a positive movement, exciting in itself, hearing promise of greatness if it ever fulfills itself. However, it is often misdirected and open to abuse. Thus it is both promise and problem.

It is a movement born of the age of plenty, potentially a movement of self-fulfillment for the ordinary man. What has happened? For the first time in history, a degree of wealth and leisure have come to the common man. He is educated. He reads. He learns from the television. He seeks a better way. He is unsure and fumbling at this stage. He oversimplifies his goals. But the movement will gain in momentum — and hopefully in direction.

Thus it is safe to predict that the next fifty years will see the ordinary people of the world not settling for basic necessities of food, shelter, but seeking for the good life, the good life that intellectual thinkers portray, that psychology studies, that mass media depict for the man in the street. At its best this will be a drive to achieve a full and rich humanity, progress towards what Maslow calls self-actualization. It will involve learning to establish close, deep relations with other people; it will also involve pursuit of individual talents; artistic drive; time and space to be still and follow one's inner feelings and hunches; independent thinking and independent actions; deep caring and concern for the needs of others.

However, such a path is hard and demanding and requires strong goal orientation and a degree of selflessness of spirit. Many will seek these goals up an easier pathway — taking without giving, grabbing what is in short supply, owning goods without paying for them, seeking to achieve the good life even at the expense of others.

2. The world will be crowded

The second problem is easier to understand. It is more talked about and we notice it already in our cities. Our country, our province will be more crowded. Let us look at the situation more closely. The population in underdeveloped countries will increase alarmingly and people

looking for space, seeking the good life, will spill over inevitably in their hundreds of thousands to less populated countries. How are we going to cope with overcrowding, foreign tongues, strange habits and customs, values different from our own? How is the stranger to find his niche and in turn to seek a full good life for himself and his family? The population increase will deplete resources and when the basic requirements of life run low, so do tolerance and kindness for the stranger in our midst. This then is our problem, and it is formidable.

3. A feeling of alienation

The third problem is not easy to pin down. It has a multiplicity of causes. Again we see it increasingly as the years go by, and we recognize the destruction it can cause.

The sense of alienation is felt first by the youth of the country. It is a product of rootlessness and of inability to cope. The movement to towns and cities of people seeking the good life has caused vast problems of isolation. Relatives and friends are left far away and it is hard to establish a pattern of friendship and acceptance in a strange place, where the total way of life may be foreign. It takes time and it takes skills and understandings which the newcomer may not have. He is borne along for a time by his own dreams but they may prove impossible to realise. The good life has eluded the seeker. Loneliness, defeat, frustration easily turn to alienation. The result can be calamitous indeed, destructive of the individual and destructive of the society he lives in.

This is not a very tangible problem, but it is nevertheless a very real one. It is a problem which will assume major proportions in the years ahead as more and more people crowd to our land, more and more settle in our cities, all seeking a new heaven. We must ask ourselves, how can we bring the stranger, the drifter, the outcast into a society already overcrowded and make him feel useful, wanted, worthy?

The place of the Home Economist

These then are three major areas where problems will emerge in the next decades. What can we do about them?

Of course the home economist on her own can do little, but she will be part of a team and will bring her own area of expertise. She stands midway between the academic world and the community of homes and families, ready to translate new findings and new thoughts in terms of daily living. She has much to offer, indeed, and should be a key figure among those of the helping profession. She has many strengths. She also of course has areas where she must develop new competencies to meet the new age.

Let us first stress her strengths and see these in terms of the problems under discussion. As people pursue their quest for the good life and struggle to arrive at a full humanity, the home economist can offer her insight into human development in terms of basic needs of individuals, growth to maturity, child rearing, study of old age. These are vital areas. Her insight can be of tremendous importance to this total movement.

Then again, people seeking housing will look for homes which will express and accommodate the life style to which they aspire. Who better than the home economist can guide them to think in terms of real needs and whole family units, can offer tangible, practical advice concerning management of home and family?

The stranger needs to be integrated into the community. What is a better start than the everyday problems of providing food, clothing, shelter — areas where stranger and native born — both have strengths to share? What is more important to family groups than to analyse relationships of parents and children in the new culture? Indeed in all matters of home and family, home economists have a very traditional role to play as they help this group to integrate and to accommodate themselves to their new world.

The isolated one needs understanding help to aid him in social and psycho-

logical integration before alienation sets in. He, like the new settler, may need help in managing life's more mundane problems of food, clothing and shelter. He may need help in clarifying his goals and breaking them down to manageable size. He needs to talk. And he needs people to listen.

Readers will add to this list, especially those who have already faced some of these problems at first hand. Many of the ways we would use are tried and true and are part of the repertoire of any good home economist.

There are however, areas in which we must develop as professionals, and learn new skills or at least build on the old, to achieve greater competencies. I list a few of these as I see them.

(a) The expertise of the home economist will be needed by people of all ages. She cannot limit her professional skills to the teenagers and young twenties. The home economist must be at work where there are expectant mothers, babies, young children, adults, old people, any people.

(b) Much work will be with interest groups. The captive audience which has been a pattern in our schools for so long must give way to teaching at any age level, wherever the need arises.

(c) As a corollary to this, group dynamics must be understood. Groups must be taught to explore and express their own needs and set their own goals. In a mixed society, a teacher cannot dictate values and standards and goals.

(d) Interpersonal relations will take on major importance. Again, groups will be utilized in this area of instruction. Counselling will be another important technique and all good Home Economics teachers will also be good counsellors — of people of all ages.

(e) Communication will be a whole area to be explored. Teachers must help their students to gain understanding of each other, to develop techniques of listening, questioning, supporting and strengthening each other.

(f) Mass media will inevitably become much more sophisticated. The good teacher must be well able to use the media as valuable tools.

(g) Where will teaching take place? It will not be confined to schools. The professional home economists must be prepared to go wherever the need arises — into homes, work places, informal meeting places.

(h) When will teaching take place? Teaching will take place whenever a group of people arrive at a stage where knowledge becomes pertinent. Our home economist must learn a new flexibility.

This then is the new age, in some ways a frightening age with problems of overwhelming proportions; in other ways a challenging age, for those who would add to their repertoire of skills and go forward to help people to be the kind of people they want to be, to live in harmony with their neighbours, to raise their families to be good people and worthy citizens, to be ever ready to stretch a helping hand to the person who is lonely, distressed, or unable to cope.

This is our challenge.

Dorothy Frater, Ph.D.

Editor's Note — The challenge appears to be world wide — read the article written in England in this issue.

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Resource Fair '77

Red Deer Home Economics Association and the Parkland Regional Home Economics Council of the Alberta Teachers' Association are pleased to report that their second bi-annual Resource Fair was a huge success.

Twenty-seven public service organizations set up booths in the Parkland Shopping Mall, Red Deer, on March 19, 1977. Personnel at each booth provided information about the services available from their group, and answered questions from the public. Canada Pension Plan, Alberta Consumer and Corporate Affairs, La Leche League, Alberta Alcoholism and Drug Abuse Commission, Textile Analysis Service, Block Parent Program, Big Brothers, Alberta Funeral Information Service, Parkland Regional Library, Alberta Cattle Commission, and Income Maintenance Branch were only a few of the participants in Resource Fair '77.

Marilyn Sharp from Lacombe, Alberta headed the hardworking Resource Fair Committee. Agencies were very positive in their evaluation of the day. Some visitors reported very specific help received from various personnel, and hand-outs were taken for future reference.

Plans are now underway for Resource Fair '79.

Program Convenor Jackie Anderson and President, Shirley Holm, of R.D.H.E.A. welcome guests to Resource Fair '77.

The public received help from qualified personnel and were given printed information on services available from 27 public service organizations.

NEW BOOKS

Food Service Planning, Kotschevar, Lendal and Terrell, Margaret. John Wiley & Sons, Toronto, 1977, Pp. 601; price, cloth $22.50, paper, not available.

In their preface to this second edition, the authors suggest this book is useful for those "actively engaged in study or planning of food facility layouts . . . also for dietitians and other food managers who will be responsible for operating facilities." The format of the book is most definitely that of a textbook and leads one to wonder if the intended audience really was as expressed. There are guidelines given for the instructor following most sections and each chapter has a group of suggested student assignments. The book is definitely a useful text for those who have never had any exposure to the methods of food service layout and equipment selection. It is also suggested as a resource book for any food service operation.

The scope of the book is broad. It is comprehensive in treating the conventional food service operation. Points from the preparation of the layout through to equipment and menu analysis in a conventional system are covered in detail. Specific modifications of this system, such as catering and school satellite feeding systems are only looked at in the overview approach. A more detailed coverage of the planning and set up of a commissary and other contemporary feeding situations would have added much to this second edition of a classic text.

Several points about this second edition are worthy of note. There are some pieces of information which have limited use and questionable basis. One example of this is seen in the section on "Human factors in work accomplishment", in which the authors suggest that it is advisable to know the sex and racial origin of employees when planning a work area in order to ensure appropriate facilities. Most food service managers would be hard pressed to project the employment market, and to set height reach distances based on the potential employee. Another point to note is that the photos in the second edition, for the most part, are taken from the original edition. They are of poor quality, poor definition, and impart a dated look to the book. The graphs and charts are clear and of a good scale. Content, where appropriate, is given in both the metric and English systems.

The updating of this basic book in general, is an improvement over the original. The text is easier to read, with more clearly defined topic areas and although the references no longer appear at the end of chapters, the appendix includes a comprehensive and updated bibliography. The book is recommended for all those who seek guidance or references in layout planning and equipment selection and arrangement.

Reviewed by Sheila McDonagh, Lecturer, Ryerson Polytechnical Institute, Toronto.

Living Nutrition, by Fredrick J. Stare and Margaret McWilliams, John Wiley and Sons, Toronto; Second edition: pp. 497; Price: Cloth, $12.95, paper, not available.

Living Nutrition is a nutrition textbook designed more for undergraduate students who are taking a nutrition course rather than foods and nutrition major students.

The text has been revised, the tables updated, and the sequence of presentation modified from the first edition. At the end of each chapter, there is an extensive list of selected references.

The first part of the text deals with an in depth discussion on the socio-psychological aspects of food and the problems of the world's food supply. A minor error occurred in this section wherein the figures in a bar graph do not correspond with the graph itself.

The next part of the text discusses in detail nutrition from a physiological viewpoint with particular emphasis on carbohydrates, proteins and fat. There is less detail on the vitamins and minerals. However, there is sufficient information as to the relationship of vitamins and minerals to health and to body metabolism.

In contrast to the first edition, nutrition for the various age groups is discussed in fair detail in the third section of the text which previously was included under the socio-psychological aspects of nutrition in the first section.

The last section, a new section entitled "Applying Nutrition" discusses consumer information and meal planning.

In summary, this text with its reorganization is more readable and logical in its approach than the first edition. The only comment would be that a number of tables are based on American figures and would have to be transposed to be applicable to the Dietary Standard for Canada as well as fortification and labelling regulations.

Reviewed by Patricia McClinton, Nutritionist, Nutrition Division, Canadian Dairy Foods Service Bureau.

Submitted by l'Ecole des Sciences Domestiques, Université de Moncton

La reconnaissance de la voix maternelle par le nourrisson.

J. Mehler, M. Barrière et D. Jassik-Gerschenfeld
1976
La Recherche, 70: 786-789

L'étude a pour objectif de découvrir si le bébé distingue la voix de sa mère et d'analyser cette aptitude. Les paramètres utilisés sont: le timbre, l'intonation et le système phonologique de la mère.

L'expérience porte sur quarante et un bébés de quatre à six semaines. Chaque mère enregistre deux conversations avec le bébé (sans la présence du bébé). Pour un des deux enregistrements, elle ne donne pas d'intonation. On mesure la pression de la succion et un intégrateur totalise les succions. A chaque fois que celuici atteint un seuil fixé au préalable une horloge puis un magnétophone se déclenchent.

Les bébés sont placés en deux groupes: ceux qui entendront d'abord la voix de leur mère et ceux qui entendront en premier lieu la voix d'une mère inconnue.

On note une augmentation du taux de succion chez les bébés qui entendent la voix de la mère ce qui n'est pas les cas pour l'autre groupe. Puis on inverse les enregistrements et on voit que le taux de succion diminue chez les bébés qui entendent maintenant une voix inconnue et augmente pour les bébés qui, cette fois, entendent la vois maternelle.

On analyse les résultats selon deux critères: de notation globale (différence absolue du taux de succion) et de changement minimal (changement supérieur à quinze pourcent).

L'utilisation des voix enregistrées sans intonation ne démontrent aucune modification notable du taux de succion.

Les résultats confirment l'hypothèse selon laquelle les bébés âgés d'un mois distinguent la voix naturelle de leur mère. Cependant, l'étude ne peut indiquer si l'élément déterminant la reconnaissance de la voix de la mère est son timbre de voix ou son intonation.

On conclut que la voix de la mère, avec sa structure propre, représente un paramètre essentiel dans l'élaboration des premières structures de l'environnement acoustico-linguistique du nouveau-né.

"Food for Life" exhibit: innovation in nutrition education

J. A. Milner
1977
Food Technology, 31(2): 32

Selon Milner, le "Museum of Science and Industry" de Chicago est un moyen efficace d'éducation nutritionnelle. L'exposition traditionnellement centrée sur le bétail et son alimentation a récemment été remplacée par une nouvelle exposition mettant en valeur l'alimentation et la nutrition humaines. Huit mois après son inauguration, plus de deux millions de personnes l'avaient visitée. Celle-ci, conçue pour donner l'impression d'un marché ouvert, présente des modèles d'aliments en cire ou en vinyle. De plus, onze terminaux d'ordinateur placés ici et là répondent aux questions des visiteurs. Pour individualiser l'information, un terminal placé à l'entrée permet au visiteur qui le désire d'entrer son poids, sa taille, son âge et son sexe; l'ordinateur lui émet alors un numéro qu'il utilise pour obtenir des réponses personnelles à ses questions en matière d'alimentation et de nutrition. Les écoliers tirent grand profit de cette exposition. Dans cet article, l'auteur note que les professeurs préparent des questionnaires pour les jeunes de l'élémentaire, du secondaire et du collégial; les réponses aux questions peuvent être trouvées aux étalages de l'exposition. L'exposition compte également plusieurs autres centres d'intérêt: un ergocycle permet au visiteur d'observer sa dépense énergétique; une section est réservée à l'évaluation sensorielle des aliments. Les compagnies alimentaires invitent les passants à juger de leurs nouveaux produits. Il semble que les onze terminaux d'ordinateur ne suffisent pas à rencontrer la demande. La compagnie Swift, une des deux industries qui ont patronné le projet, songe à augmenter le nombre d'ordinateurs. En plus des industries alimentaires, certains nutritionnistes et professeurs d'université ont collaboré à la réalisation de ce nouveau genre d'éducation nutritionnelle.

Le rôle du four microondes pour améliorer la nutrition dans les services alimentaires

R. V. Decareau
1975
Transactions of the International Microwave Power Institute, 4:69

La valeur nutritive des aliments est fortement influencée par le mode de cuisson utilisé. Il est reconnu qu'avec le temps, les vitamines et certains autres nutriments se détériorent à des températures élevées. Decareau fait une revue de la littérature

comparant les pertes de vitamines durant la cuisson faite conventionnellement et celle faite au four microondes. Avec la chaleur conventionnelle, les pertes importantes surviennent surtout quand les aliments sont gardés au chaud durant de longues périodes. Ceci se produira surtout lorsqu'un grand nombre de personnes devront être servies. Les conclusions majeures de cette revue littéraire sont les suivantes: (1) L'énergie microondes, lorsqu'ele est utilisée adéquatement, est significativement supérieure aux autres modes de préparation des aliments pour ce qui est de la retention des nutriments. (2) A cause des pertes de nutriments dans l'eau lors de la cuisson sous pression, la cuisson au four microondes permet une meilleure retention des nutriments dans les aliments. Il semble qu'un système utilisant les microondes, pour chauffer les aliments congelés, peut avoir des avantages très importants pour certains segments de la population. Un service avec four microondes pour le service du lunch à l'école ainsi que pour la préparation des aliments dans les résidences de vieillards présente des avantages nutritionnels importants.

Développement d'une technique de mesure des variations dimensionnelles et des forces de retrait des articles textiles soumis a des conditions variables de température et d'humidité relative.

M. Sotton, M. Chevalier
1976
Bull. Scient. Institut Textile de France, 5: 69-88.

L'étude des variations dimensionnelles des articles textiles sous l'effet des changements d'humidité relative et de température est faite dans les conditions suivantes: enceinte climatique permettant de varier les paramètres humidité relative et température, et supports d'échantillons équipés de capteur de déplacement permettant l'enregistrement continu des variations de dimensions de tissus et de forces affectant les tissus préalblement tendus.

On remarque, à l'examen des courbes expérimentales obtenues, que les variations dimensionnelles sont très importantes, mais alternativement négative et positive suivant les variations cycliques d'humidité relative. La tension des échantillons varie aussi selon les conditions de température.

Dans l'enceinte climatique on reproduit des conditions sévères afin de simuler les variations d'ambiance pouvant être supportées par les articles textiles tendus ou collés sur les murs. Les températures varient entre 10 et 40° C et l'humidité relative est de 35 a 90%.

Les résultats permettent d'une part de faire des estimations sur les conditions de pose des revêtements textiles et d'autre part, d'optimiser le produit en vue de son utilisation en mural. Cette optimisation peut être obtenue à partir soit de la contexture du tissu ou du fil, de la nature des fibres, soit de la qualité du traitement de finissage.

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ANNOUNCEMENT

A unique brochure "Passion Food Isn't Enough" has just been re-released by the division of Community Health, University of Toronto. The brochure attempts to answer these questions about nutrition and family planning:

"Why bother about nutrients if you never intend to be pregnant"?

"How useful is good nutrition prior to pregnancy"?

"Wondering about quick weight loss after pregnancy"

"Want to know about nutrition and 'the Pill' "?

"Are there differences in nutrient needs"?

"Can you reduce while using 'the Pill' "?

"What about 'the Pill' and weight gain"?

"Can 'the Pill' affect blood sugar level"?

"Concerned about nutrition and the IUD"?

"Can the IUD change iron needs"?

"Will an IUD affect breastfeeding"?

"Wondering about weight gain after sterilization"?

"Interested in the relationship between nutrition and fertility problems"?

The brochure was prepared by Nutritionist Charlotte Bonds, B.S., M.A., and Dr. Marion Powell, Co-investigators in a demonstration project funded from 1975-77 by the Family Planning Division of National Health and Welfare to show the acceptability and usefulness of adding nutrition services to family planning projects. The first set of 4,500 brochures were released in August 1976 and exhausted by October. This prompted the government to provide funding for another 10,000. In addition to answering the above questions, the new brochure has a chart which shows how several foods compare as sources of six important nutrients.

Copies may be obtained upon request to the Family Planning Division of National Health and Welfare, Room 662, Brooke Claxton Building, Ottawa, Ontario K1A 1B5.

Anyone wanting to know more about the demonstration project or the information presented in the brochure, should contact Mrs. Bonds at (416) 978-6960 (Wednesday and Thursdays) or write her at Room 145 Fitzgerald Building, Department of Health Administration, University of Toronto.

The Butterick Kitchen Equipment Handbook — a 192 page illustrated consumers guide to buying and caring for cookware, utensils and appliances. Information on table appointments and suggestions for serving food attractively are also included. The guide's author is Darlene Kress, a faculty member of the Home Economics department of Hunter College, City University of New York and it will be available at bookstores on April 28, 1977 at a cost of $3.95 per copy.

ANNOUNCING THE REVISED CANADA'S FOOD GUIDE

On Thursday, March 24, 1977, Marc Lalonde, Minister of Health and Welfare Canada released the revised Canada's Food Guide.

The objective of the Food Guide is to provide a common basis for nutrition education. The changes in the Guide make it more applicable to many existing programs and it is a tool which with its flexibility can be adapted to the various needs and lifestyles of Canadians.

"The new Food Guide was developed by the Federal/Provincial Committee on Nutrition, an advisory committee to the Department of National Health and Welfare. It evolved from earlier versions through evaluation of food consumption patterns found in the Nutrition Canada Survey. Comments on the revision were obtained from dietitians, home economists, physicians, and nutritionists, both through professional associations and directly from individuals"[1].

The major change in the Guide is the merger of the fruit and vegetable groups into one group. As stated in the news release "This change does not minimize the importance of vegetables nor encourage the substitution of fruits and vegetables". In the guide four to five servings of fruits and vegetables daily are suggested with the statement "include at least two vegetables"[1]. It is hoped with the advent of this four food group Guide, other food guides will be replaced with Canada's Food Guide thus providing continuity in nutrition programmes on a national basis.

[1]Health and Welfare Canada, March 24, 1977. Revised Canada's Food Guide. New Release.

In the milk and milk products group, other dairy foods have been suggested as well as milk. In this food group, there are slight changes in the number of servings according to age groups.

Two servings of meat and alternates are recommended and three to five servings of whole grain or enriched breads and cereals with emphasis on "whole grain".

Another innovation in this guide is the inclusion of sample serving sizes given in metric and imperial measures.

The format of the guide is an attractive, colorful, 8-1/2" x 11" tear sheet with primarily artwork on one side and details about each food group on the other side.

A manual on the use of the guide will be available later in the spring. "Designed primarily for teachers and others involved in nutrition education, it includes teaching ideas and covers such subjects as snacking, use of supplements and the special requirements of certain individuals".[1] It has been mentioned that posters might also be available. Canada's Food Guide is available free of charge from local health units and provincial health departments.

Reviewed by: Patricia McClinton, Nutritionist, Nutrition Division, Canadian Dairy Foods Service Bureau.

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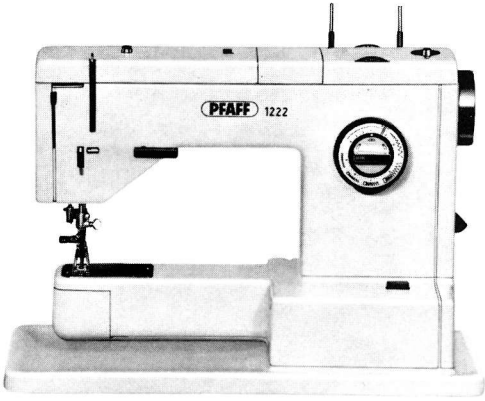

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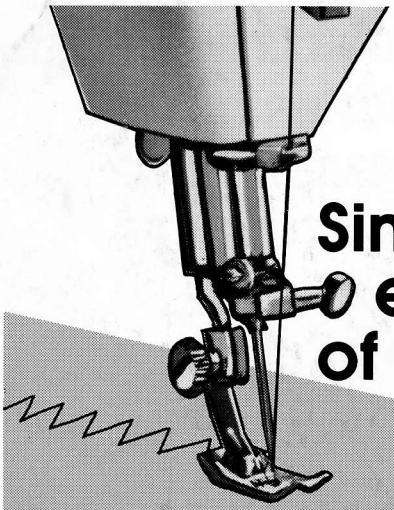

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